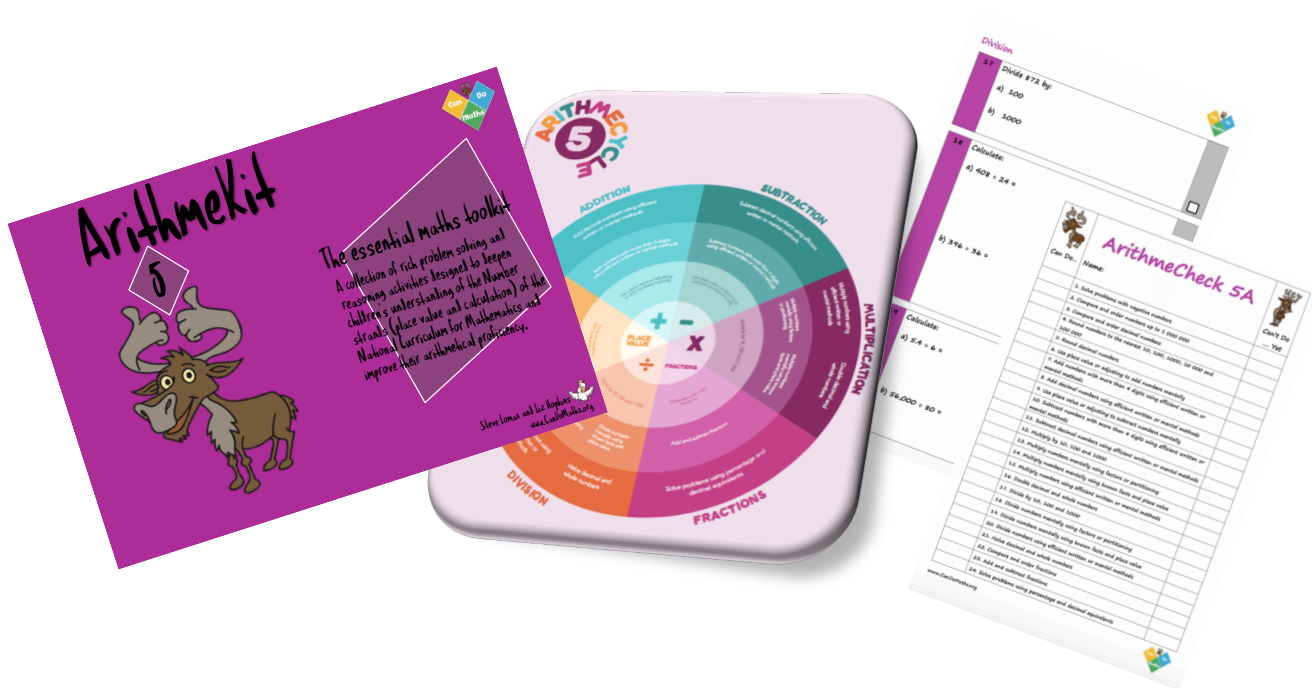


ArithmePractice




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AK5.1a

Name

Solve problems with negative numbers

| | | |
|----------------------------------|-------------------------------------|------------------------------------|
| $8 - 13 =$ | $-12 - 19 =$ | $5 - 9 < 10 - 16$ True or False |
| $22 - 37 =$ | $6 - 9 =$ | $4 - 12 =$ |
| $2 - 4 > 1 - 1$ True or False | $6 - 14 > 10 - 16$ True or False | $5 - 8 =$ |
| $8 - 21 =$ | $6 - 13 =$ | $-3 - 13 =$ |



AK5.1b

Name

Solve problems with negative numbers

| | | |
|------------------------------------|-----------------------------------|-------------------------------------|
| $5 - 13 =$ | $-2 - 7 =$ | $16 - 23 =$ |
| $12 - 17 =$ | $-7 - 3 =$ | $3 - 15 < 11 - 21$ True or False |
| $3 - 9 < 12 - 19$ True or False | $-3 - 6 =$ | $-4 - 11 =$ |
| $3 - 21 =$ | $2 - 9 > 6 - 14$ True or False | $6 - 13 =$ |



AK5.2a

Name

Compare and order numbers up to

1 000 000

| | | | | | |
|---------|----------|---------|---------|---------|---------|
| 23,455 | 23,327 | 432,589 | 568,996 | 123,478 | 122,678 |
| 23,587 | 23,465 | 678,954 | 576,344 | 144,356 | 133,783 |
| 63,568 | 63,687 | 674,321 | 546,756 | 23,457 | 12,456 |
| 63,623 | 63,528 | 546,893 | 667,899 | 34,576 | 13,867 |
| 458,786 | 435,654 | 867,985 | 868,933 | 19,687 | 19,587 |
| 412,546 | 439,598 | 863,574 | 864,312 | 19,488 | 19,335 |
| 313,423 | 323, 456 | 67,938 | 67,855 | 99,989 | 99,899 |
| 300,509 | 300,356 | 67,945 | 67,456 | 99,786 | 99,876 |

Circle the largest number and cross out the smallest number



AK5.2b

Name

Compare and order numbers up to

1 000 000

| | | |
|----------|---------|---------|
| 54,321 | 943,267 | 13,456 |
| 58,432 | 945,123 | 13,566 |
| 435, 214 | 48,976 | 867,509 |
| 435, 617 | 49,234 | 873,689 |
| 74,649 | 762,349 | 187,989 |
| 75,733 | 786,321 | 190,345 |
| 76,324 | 135,978 | 28,987 |
| 78,543 | 136,002 | 29,345 |

Write a number that goes between each pair



A5.3a

Name

Compare and order decimal numbers

| | | |
|-------------------------------------|------------------------------------|----------------------------------|
| 6.11 6.23 6.544 6.403 | 7.896 7.65 7.983 7.986 | 14.54 14.9 14.46 14.354 |
| 4.008 4.576 4.07 4.553 | 56.7 56.08 56.346 5.75 | 16.45 16.34 16.87 16.25 |
| 9.876 9.867 9.86 9.678 | 5.505 5.55 5.055 5.053 | 2.235 2.453 2.265 2.479 |
| 15.678 15.768 15.897 15.89 | 52.312 52.3 52.321 52.342 | 7.865 7.659 7.702 7.634 |

Put each set of numbers in order



AK5.3b

Name

Compare and order decimal numbers

| | | |
|------------------|------------------|------------------|
| 23.567 23.876 | 56.7 58.7 | 12.208 13.012 |
| 3.5 3.6 | 0.568 0.586 | 234.6 235.4 |
| 48.004 48.103 | 13.867 13.878 | 6.007 7.006 |
| 54.2 57.8 | 19.034 19.1 | 45.33 45.486 |

Write a number that goes between each pair



AK5.4a

Name

Round numbers to the nearest 10, 100, 1000, 10 000
And 100 000



| | | |
|-------------------------------------|--------------------------------------|--------------------------------------|
| ...to the nearest 10 513.6 | ..to the nearest 10,000 34,674 | ..to the nearest 100,000 167,124 |
| ..to the nearest 10,000 543,398 | ...to the nearest 10 7827 | ..to the nearest 10,000 365,832 |
| ..to the nearest 10,000 56,123 | ..to the nearest 10,000 1,634,781 | ..to the nearest 100,000 467, 567 |
| ..to the nearest 100,000 313,566 | ..to the nearest 1,000 534,398 | ..to the nearest 10,000 234,576 |

Round these numbers...



AK5.4b

Name

Round numbers to the nearest 10, 100, 1000, 10 000
And 100 000



| | | |
|-------------------------------------|-------------------------------------|-------------------------------------|
| ..to the nearest 10,000 43,675 | ..to the nearest 100,000 987,123 | ..to the nearest 100,000 817,985 |
| ..to the nearest 10,000 313,566 | ...to the nearest 1000 73,498 | ..to the nearest 10,000 401,899 |
| ..to the nearest 10,000 68,943 | ..to the nearest 10,000 656,214 | ..to the nearest 100,000 555,001 |
| ..to the nearest 100,000 566,342 | ..to the nearest 1,000 19,854 | ..to the nearest 10,000 364,392 |

Round these numbers...



AK5.5a

Name

Round decimal numbers

| | | |
|---------------------------------|---------------------------------|----------------------------------|
| 3.45 to 1dp | 36.78 to nearest tenth | 15.6 to the nearest whole number |
| 4.32 to nearest tenth | 9.87 to nearest tenth | 5.78 to 1dp |
| 9.4 to the nearest whole number | 15.63 to 1dp | 9.12 to 1dp |
| 12.65 to 1dp | 8.5 to the nearest whole number | 26.99 to nearest tenth |

Round these numbers...



AK5.5b

Name

Round decimal numbers

| | | |
|---------------------------------|---------------------------------|------------------------|
| 7.66 to 1dp | 2.7 to the nearest whole number | 24.32 to nearest tenth |
| 41.78 to nearest tenth | 8.96 to 1dp | 16.87 to nearest tenth |
| 8.6 to the nearest whole number | 15.86 to 1dp | 6.57 to 1dp |
| 1.95 to 1dp | 11.11 to nearest tenth | 19.08 to 1dp |

Round these numbers...



AK5.6a

Name



Use place value or adjusting to add numbers mentally
(mentally means 'in your head' or 'with jottings'.)

| | | |
|-----------------------|-----------------------|-----------------------|
| $125,700 + 97,000 =$ | $345,670 + 37,000 =$ | $543,986 + 29,000 =$ |
| $546,329 + 98,000$ | $123,900 + 103,000 =$ | $235,981 + 105,000 =$ |
| $623,894 + 198,000 =$ | $878,878 + 102,000 =$ | $473,998 + 19,000 =$ |
| $333,291 + 48,000 =$ | $129,840 + 49,000 =$ | $324,756 + 95,000 =$ |



AK5.6b

Name



Use place value or adjusting to add numbers mentally
(mentally means 'in your head' or 'with jottings'.)

| | | |
|-----------------------|----------------------|-----------------------|
| $320,700 + 58,000 =$ | $416,234 + 79,000 =$ | $264,802 + 103,999 =$ |
| $954,467 + 43,995 =$ | $872,500 + 11,000 =$ | $612,482 + 78,998 =$ |
| $367,894 + 297,000 =$ | $243,564 + 99,000 =$ | $78,435 + 19,999 =$ |
| $456,723 + 62,989 =$ | $234,687 + 89,000 =$ | $868,095 + 92,000 =$ |



AK5.7a

Name

Add numbers with more than 4 digits using
efficient written or mental methods
(mentally means 'in your head' or 'with jottings'.)



| | | |
|-------------------------|-------------------------|-------------------------|
| $31\ 461 + 67\ 032 =$ | $56\ 673 + 32\ 123 =$ | $28\ 194 + 33\ 200 =$ |
| $23\ 876 + 48\ 999 =$ | $65\ 423 + 11\ 988 =$ | $44\ 233 + 63\ 218 =$ |
| $402\ 632 + 169\ 989 =$ | $574\ 632 + 281\ 730 =$ | $607\ 593 + 463\ 000 =$ |
| $723\ 498 + 134\ 502 =$ | $576\ 832 + 381\ 246 =$ | $241\ 358 + 374\ 659 =$ |



AK5.7b

Name

Add numbers with more than 4 digits using
efficient written or mental methods
(mentally means 'in your head' or 'with jottings'.)



| | | |
|-----------------------|-------------------------|-------------------------|
| $16\ 453 + 3996 =$ | $97\ 995 + 13\ 006 =$ | $49\ 182 + 44\ 233 =$ |
| $76\ 832 + 57\ 684 =$ | $30\ 465 + 18\ 989 =$ | $34\ 242 + 82\ 136 =$ |
| $751\ 632 + 6995 =$ | $564\ 732 + 281\ 730 =$ | $644\ 513 + 644\ 513 =$ |
| $7428 + 439\ 500 =$ | $576\ 000 + 2367 =$ | $245\ 451 + 6549 =$ |



AK5.8a

Name



Add decimal numbers using efficient written or mental methods (mentally means 'in your head' or 'with jottings'.)

| | | |
|-------------------|-------------------|------------------|
| $9.672 + 5.67 =$ | $4.32 + 4.65 =$ | $3.45 + 8.867 =$ |
| $4.684 + 2.34 =$ | $4.632 + 4.065 =$ | $3.405 + 8.9 =$ |
| $6.708 + 3.999 =$ | $3.3 + 6.789 =$ | $4.05 + 6.809 =$ |
| $4.52 + 3.49 =$ | $8.006 + 3.42 =$ | $5.062 + 5.67 =$ |



AK5.8b

Name



Add decimal numbers using efficient written or mental methods (mentally means 'in your head' or 'with jottings'.)

| | | |
|-------------------|-------------------|------------------|
| $2.769 + 6.75 =$ | $2.43 + 4.56 =$ | $5.43 + 6.89 =$ |
| $4.684 + 6.098 =$ | $4.326 + 3.9 =$ | $4.05 + 6.077 =$ |
| $8.067 + 2.345 =$ | $9.336 + 2.989 =$ | $8.77 + 9.804 =$ |
| $4.49 + 5.51 =$ | $8.864 + 9.042 =$ | $5.99 + 6.99 =$ |



AK5.9a

Name



Use place value or adjusting to subtract numbers mentally (mentally means 'in your head' or 'with jottings'.)

| | | |
|----------------------|----------------------|-----------------------|
| $197,250 - 99,999 =$ | $34,758 - 19,000 =$ | $345,215 - 19,000 =$ |
| $923,645 - 98,000 =$ | $867,988 - 39,000 =$ | $786,532 - 101,000 =$ |
| $894,657 - 58,000 =$ | $878,878 - 69,989 =$ | $676,676 - 39,000 =$ |
| $567,892 - 48,000 =$ | $279,840 - 19,990 =$ | $756,324 - 95,000 =$ |



AK5.9b

Name



Use place value or adjusting to subtract numbers mentally (mentally means 'in your head' or 'with jottings'.)

| | | |
|-----------------------|----------------------|----------------------|
| $725,678 - 97,000 =$ | $567,304 - 27,000 =$ | $685,463 - 79,985 =$ |
| $400,502 - 79,050 =$ | $978,065 - 87,000 =$ | $500,145 - 69,000 =$ |
| $894,467 - 197,995 =$ | $765,423 - 69,000 =$ | $743,658 - 39,997 =$ |
| $798,291 - 68,000 =$ | $986,840 - 49,990 =$ | $247,546 - 27,000 =$ |



Name
 AK5.10a
 Subtract numbers with more than 4 digits using
 efficient written or mental methods
 (mentally means 'in your head' or 'with jottings'.)



| | | |
|---------------------|---------------------|---------------------|
| $67,584 - 43,253 =$ | $70,005 - 56,982 =$ | $88,976 - 54,263 =$ |
| $88,997 - 30,008 =$ | $56,440 - 4339 =$ | $89,657 - 44,348 =$ |
| $99,550 - 54,349 =$ | $34,002 - 23,989 =$ | $45,003 - 34,921 =$ |
| $50,067 - 49,459 =$ | $98,706 - 54,738 =$ | $87,659 - 43,569 =$ |



Name
 AK5.10b
 Subtract numbers with more than 4 digits using
 efficient written or mental methods
 (mentally means 'in your head' or 'with jottings'.)



| | | |
|-----------------------|-----------------------|-----------------------|
| $675,864 - 232,532 =$ | $896,578 - 256,399 =$ | $988,976 - 542,638 =$ |
| $66,940 - 32,530 =$ | $51,008 - 43,979 =$ | $88,965 - 84,434 =$ |
| $997,546 - 334,349 =$ | $578,650 - 334,103 =$ | $450,203 - 340,201 =$ |
| $67,007 - 66,459 =$ | $87,906 - 47,888 =$ | $870,059 - 69,969 =$ |



Name

AK5.11a

Subtract decimal numbers using efficient
written or mental methods

(mentally means 'in your head' or 'with jottings'.)



| | | |
|----------------|-----------------|-----------------|
| $6.77 - 5.3 =$ | $9.2 - 4.35 =$ | $8 - 5.6 =$ |
| $8.3 - 6.45 =$ | $7 - 4.03 =$ | $9.67 - 5.43 =$ |
| $9.04 - 3.7 =$ | $6.79 - 4.53 =$ | $4 - 2.56 =$ |
| $10 - 7.49 =$ | $6.99 - 3.45 =$ | $7.83 - 5.99 =$ |



Name

AK5.11b

Subtract decimal numbers using efficient
written or mental methods

(mentally means 'in your head' or 'with jottings'.)



| | | |
|----------------|-----------------|-----------------|
| $8.7 - 3.5 =$ | $2.96 - 1.35 =$ | $8 - 3.4 =$ |
| $8.88 - 3.3 =$ | $4.6 - 1.35 =$ | $7 - 3.6 =$ |
| $7.2 - 5.4 =$ | $6.9 - 1.32 =$ | $8.46 - 4.07 =$ |
| $8.8 - 5.93 =$ | $3.8 - 1.09 =$ | $9 - 6.73 =$ |



AK5.12a

Name

Multiply by 10, 100, and 1000

| | | |
|----------------------|----------------------|----------------------|
| $56,789 \times 10 =$ | $6.78 \times 100 =$ | $13.4 \times 1000 =$ |
| $5.67 \times 100 =$ | $43.56 \times 10 =$ | $0.67 \times 1000 =$ |
| $0.04 \times 10 =$ | $34.6 \times 1000 =$ | $6.78 \times 100 =$ |
| $36.7 \times 1000 =$ | $124 \times 100 =$ | $0.09 \times 10 =$ |



AK5.12b

Name

Multiply by 10, 100, and 1000

| | | |
|-----------------------|-----------------------|----------------------|
| $789.64 \times 10 =$ | $7.82 \times 100 =$ | $3.49 \times 1000 =$ |
| $27.6 \times 100 =$ | $0.9 \times 10 =$ | $2.34 \times 1000 =$ |
| $167 \times 10 =$ | $45.87 \times 1000 =$ | $0.987 \times 100 =$ |
| $34.02 \times 1000 =$ | $56.7 \times 100 =$ | $67.09 \times 10 =$ |



AK5.13a

Name

Multiply numbers mentally using factors or partitioning (mentally means 'in your head' or 'with jottings'.)



| | | |
|------------------|------------------|------------------|
| $28 \times 14 =$ | $32 \times 18 =$ | $16 \times 24 =$ |
| $27 \times 36 =$ | $12 \times 48 =$ | $24 \times 25 =$ |
| $42 \times 35 =$ | $48 \times 22 =$ | $30 \times 24 =$ |
| $66 \times 8 =$ | $16 \times 9 =$ | $60 \times 8 =$ |



AK5.13b

Name

Multiply numbers mentally using factors or partitioning (mentally means 'in your head' or 'with jottings'.)



| | | |
|------------------|------------------|------------------|
| $32 \times 14 =$ | $25 \times 18 =$ | $36 \times 8 =$ |
| $72 \times 24 =$ | $18 \times 16 =$ | $14 \times 22 =$ |
| $81 \times 12 =$ | $96 \times 24 =$ | $32 \times 8 =$ |
| $42 \times 16 =$ | $15 \times 8 =$ | $48 \times 12 =$ |



AK5.14a

Name



Multiply numbers mentally using known facts and place value (mentally means 'in your head' or 'with jottings').

| | | |
|---------------------|---------------------|---------------------|
| $0.3 \times 6 =$ | $1.2 \times 40 =$ | $4.8 \times 200 =$ |
| $60 \times .05 =$ | $500 \times 0.8 =$ | $2.8 \times 2 =$ |
| $0.02 \times 50 =$ | $0.07 \times 80 =$ | $0.04 \times 400 =$ |
| $0.09 \times 0.2 =$ | $3.6 \times 0.02 =$ | $11 \times 0.07 =$ |



AK5.14b

Name



Multiply numbers mentally using known facts and place value (mentally means 'in your head' or 'with jottings').

| | | |
|---------------------|---------------------|---------------------|
| $0.8 \times 4 =$ | $1.4 \times 50 =$ | $6.4 \times 20 =$ |
| $120 \times .03 =$ | $400 \times 0.06 =$ | $5.6 \times 0.2 =$ |
| $0.02 \times 60 =$ | $0.06 \times 80 =$ | $0.04 \times 800 =$ |
| $0.9 \times 0.03 =$ | $2.4 \times 0.05 =$ | $12 \times 0.09 =$ |



AK5.15a

Name



Multiply numbers using efficient written or mental methods (mentally means 'in your head' or 'with jottings'.)

| | | |
|--------------------|--------------------|---------------------|
| $27 \times 99 =$ | $122 \times 25 =$ | $34 \times 29 =$ |
| $476 \times 49 =$ | $897 \times 59 =$ | $5.67 \times 40 =$ |
| $87.2 \times 30 =$ | $6.89 \times 19 =$ | $346 \times 22 =$ |
| $5436 \times 15 =$ | $7.5 \times 40 =$ | $283.4 \times 25 =$ |



AK5.15b

Name



Multiply numbers using efficient written or mental methods (mentally means 'in your head' or 'with jottings'.)

| | | |
|--------------------|--------------------|--------------------|
| $256 \times 99 =$ | $122 \times 50 =$ | $36 \times 21 =$ |
| $34.6 \times 19 =$ | $378 \times 0.3 =$ | $4.93 \times 30 =$ |
| $456 \times 0.2 =$ | $5.23 \times 19 =$ | $998 \times 44 =$ |
| $2923 \times 15 =$ | $68 \times 40 =$ | $16.5 \times 25 =$ |



AK5.16a

Name

Double decimal and whole numbers

| | | |
|-------|--------|-------|
| 26.8 | 9.7 | 234.5 |
| 867 | 45.9 | 68.07 |
| 345.1 | 743.09 | 86.02 |
| 4421 | 6784 | 987.4 |



Double the numbers



AK5.16b

Name

Double decimal and whole numbers

| | | |
|-------|--------|--------|
| 43.6 | 96.5 | 436.72 |
| 746 | 7.2 | 65.04 |
| 387.2 | 587.93 | 79.53 |
| 9784 | 7786 | 576.9 |



Double the numbers



AK5.17a

Name

Divide by 10, 100 and 1000

| | | |
|---------------------|---------------------|-----------------------|
| $6709 \div 100 =$ | $4560 \div 1000 =$ | $34.5 \div 10 =$ |
| $678,900 \div 10 =$ | $39,600 \div 100 =$ | $567,890 \div 1000 =$ |
| $2345 \div 1000 =$ | $86.7 \div 10 =$ | $345.2 \div 100 =$ |
| $2978 \div 1000 =$ | $586.3 \div 100 =$ | $456 \div 100 =$ |



AK5.17b

Name

Divide by 10, 100 and 1000

| | | |
|-----------------------|-----------------------|-----------------------|
| $56,790 \div 100 =$ | $435,600 \div 1000 =$ | $34.7 \div 10 =$ |
| $56.9 \div 10 =$ | $439.7 \div 100 =$ | $234,568 \div 1000 =$ |
| $867,432 \div 1000 =$ | $876 \div 10 =$ | $9800 \div 100 =$ |
| $56,000 \div 1000 =$ | $567 \div 100 =$ | $3.4 \div 100 =$ |



AK5.18a

Name

Divide numbers mentally using factors

or partitioning (mentally means 'in your head' or 'with jottings'.)



| | | |
|---------------------|---------------------|---------------------|
| $32,000 \div 160 =$ | $1200 \div 24 =$ | $720 \div 45 =$ |
| $2400 \div 80 =$ | $4800 \div 30 =$ | $108,000 \div 36 =$ |
| $500 \div 25 =$ | $7200 \div 18 =$ | $810,000 \div 27 =$ |
| $96,000 \div 15 =$ | $32,000 \div 160 =$ | $9,900 \div 33 =$ |



AK5.18b

Name

Divide numbers mentally using factors

or partitioning (mentally means 'in your head' or 'with jottings'.)



| | | |
|-----------------|-----------------|-----------------|
| $480 \div 24 =$ | $630 \div 42 =$ | $540 \div 18 =$ |
| $640 \div 16 =$ | $810 \div 27 =$ | $930 \div 15 =$ |
| $280 \div 35 =$ | $168 \div 24 =$ | $540 \div 45 =$ |
| $288 \div 12 =$ | $490 \div 14 =$ | $560 \div 28 =$ |



AK5.19a

Name



Divide numbers mentally using known facts and place value (mentally means 'in your head' or 'with jottings'.)

| | | |
|----------------------|---------------------|----------------------|
| $144,000 \div 120 =$ | $720 \div 0.9 =$ | $36,000 \div 0.04 =$ |
| $560 \div 0.8 =$ | $48,000 \div 600 =$ | $280 \div 0.07 =$ |
| $42,000 \div 60 =$ | $60,000 \div 0.5 =$ | $630,000 \div 70 =$ |
| $108,000 \div 900 =$ | $1440 \div 0.12 =$ | $27,000 \div 0.03 =$ |



AK5.19b

Name



Divide numbers mentally using known facts and place value (mentally means 'in your head' or 'with jottings'.)

| | | |
|-----------------------|----------------------|---------------------|
| $288,000 \div 1200 =$ | $63,000 \div 70 =$ | $1800 \div 0.04 =$ |
| $210,000 \div 30 =$ | $990,000 \div 110 =$ | $35,000 \div 0.5 =$ |
| $36,000 \div 90 =$ | $4.5 \div 0.05 =$ | $84,000 \div 120 =$ |
| $360 \div 300 =$ | $440 \div 0.11 =$ | $80 \div 400 =$ |



AK5.20a

Name

Divide numbers using efficient written or mental methods (mentally means 'in your head' or 'with jottings').



| | | |
|--------------------|---------------------|-------------------|
| $345 \div 1.5 =$ | $2648 \div 4 =$ | $64,395 \div 9 =$ |
| $12,360 \div 40 =$ | $1320 \div 12 =$ | $573 \div 15 =$ |
| $12,100 \div 11 =$ | $281,637 \div 90 =$ | $26.19 \div 9 =$ |
| $867.5 \div 5 =$ | $23,450 \div 70 =$ | $12.1 \div 1.1 =$ |



AK5.20b

Name

Divide numbers using efficient written or mental methods (mentally means 'in your head' or 'with jottings').



| | | |
|---------------------|-------------------|---------------------|
| $2,897 \div 5 =$ | $5663 \div 7 =$ | $34,569 \div 9 =$ |
| $96,000 \div 1.2 =$ | $42,496 \div 8 =$ | $5,648 \div 20 =$ |
| $280,000 \div 40 =$ | $428 \div 0.2 =$ | $7494 \div 6 =$ |
| $354.2 \div 7 =$ | $0.245 \div 5 =$ | $24,900 \div 1.2 =$ |



AK5.21a

Name

Halve decimal and whole numbers

| | | |
|--------|-------|--------|
| 16.8 | 45.2 | 98.4 |
| 682.57 | 8.45 | 76 730 |
| 78.46 | 59.87 | 12.21 |
| 14.14 | 342.8 | 6.86 |

Halve the numbers



AK5.21b

Name

Halve decimal and whole numbers

| | | |
|--------|--------|-------|
| 140.5 | 35 246 | 925.2 |
| 573.8 | 12.45 | 9.07 |
| 786.3 | 528 | 36.36 |
| 789.43 | 50.01 | 57.3 |

Halve the numbers



AK5.22a

Name

Compare and order fractions



| | | |
|---|--|--|
| $\frac{11}{12} = \frac{\quad}{36}$ | $\frac{1}{\quad} = \frac{7}{35}$ | $\frac{2}{7} = \frac{12}{\quad}$ |
| Order these $\frac{11}{16}$ $\frac{4}{6}$ $\frac{5}{12}$ | $\frac{4}{5} = \frac{\quad}{25}$ | $\frac{6}{7} = \frac{\quad}{63}$ |
| Order these $\frac{3}{4}$ $\frac{5}{8}$ $\frac{6}{12}$ | Order these $\frac{7}{15}$ $\frac{4}{10}$ $\frac{2}{5}$ | Order these $\frac{11}{12}$ $\frac{10}{24}$ $\frac{5}{6}$ |
| $\frac{8}{\quad} = \frac{56}{49}$ | Order these $\frac{2}{3}$ $\frac{5}{6}$ $\frac{7}{9}$ | $\frac{3}{\quad} = \frac{9}{21}$ |

Put them in order or fill in the missing number to make them equal



AK5.22b

Name

Compare and order fractions



| | | |
|---|--|--|
| $\frac{3}{10} > \frac{4}{5}$ True or false | $\frac{7}{10} > \frac{6}{12}$ True or false | $\frac{12}{48} < \frac{12}{24}$ True or false |
| $\frac{1}{5} > \frac{2}{7}$ True or false | $\frac{6}{18} > \frac{4}{6}$ True or false | $\frac{5}{16} < \frac{3}{10}$ True or false |
| $\frac{3}{5} < \frac{4}{7}$ True or false | $\frac{3}{11} > \frac{4}{12}$ True or false | $\frac{4}{11} > \frac{3}{5}$ True or false |
| $\frac{6}{7} > \frac{5}{6}$ True or false | $\frac{6}{8} > \frac{4}{6}$ True or false | $\frac{2}{9} < \frac{3}{10}$ True or false |



AK5.23a

Name

Add and subtract fractions



| | | |
|----------------------------------|---------------------------------|---------------------------------|
| $\frac{4}{10} - \frac{1}{5} =$ | $\frac{8}{12} + \frac{4}{6} =$ | $\frac{11}{12} - \frac{3}{4} =$ |
| $\frac{14}{24} + \frac{7}{8} =$ | $\frac{5}{6} + \frac{2}{3} =$ | $\frac{13}{20} - \frac{3}{5} =$ |
| $\frac{22}{24} - \frac{1}{4} =$ | $\frac{15}{20} + \frac{3}{5} =$ | $\frac{6}{8} + \frac{1}{2} =$ |
| $\frac{14}{36} - \frac{4}{12} =$ | $\frac{3}{8} - \frac{1}{4} =$ | $\frac{7}{9} - \frac{1}{3} =$ |



AK5.23b

Name

Add and subtract fractions



| | | |
|----------------------------------|---------------------------------|----------------------------------|
| $\frac{3}{16} - \frac{1}{4} =$ | $\frac{7}{12} - \frac{1}{3} =$ | $\frac{11}{20} + \frac{3}{10} =$ |
| $\frac{12}{18} + \frac{5}{6} =$ | $\frac{1}{6} + \frac{2}{3} =$ | $\frac{13}{24} + \frac{3}{8} =$ |
| $\frac{12}{24} - \frac{3}{12} =$ | $\frac{18}{20} - \frac{2}{5} =$ | $\frac{4}{5} - \frac{1}{2} =$ |
| $\frac{16}{20} + \frac{3}{5} =$ | $\frac{3}{8} - \frac{1}{4} =$ | $\frac{4}{9} + \frac{2}{3} =$ |



AK5.24a

Name

Solve problems using percentage and decimal equivalents



| | | |
|-----------------------|------------------|--------------------------------|
| 0.37 as a percentage | 67% as a decimal | $\frac{3}{4}$ as a percentage |
| 0.46 as a percentage | 12% as a decimal | $\frac{1}{5}$ as a percentage |
| 0.7 as a percentage | 6% as a decimal | $\frac{3}{8}$ as a percentage |
| 0.125 as a percentage | 15% as a decimal | $\frac{7}{10}$ as a percentage |

Write the equivalent



AK5.24b

Name

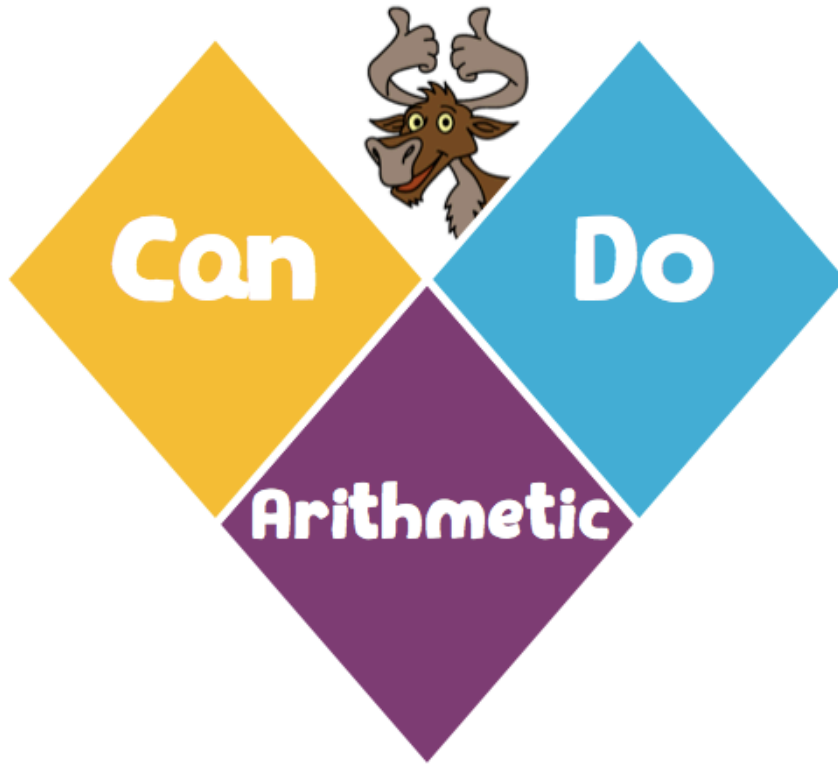
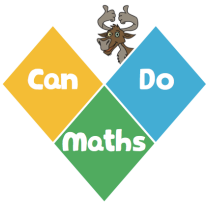
Solve problems using percentage and decimal equivalents



| | | |
|----------------------|------------------|--------------------------------|
| 0.47 as a percentage | 46% as a decimal | $\frac{1}{4}$ as a percentage |
| 0.97 as a percentage | 72% as a decimal | $\frac{3}{5}$ as a percentage |
| 0.05 as a percentage | 2% as a decimal | $\frac{5}{8}$ as a percentage |
| 0.1 as a percentage | 27% as a decimal | $\frac{9}{10}$ as a percentage |

Write the equivalent





ArithmePractice

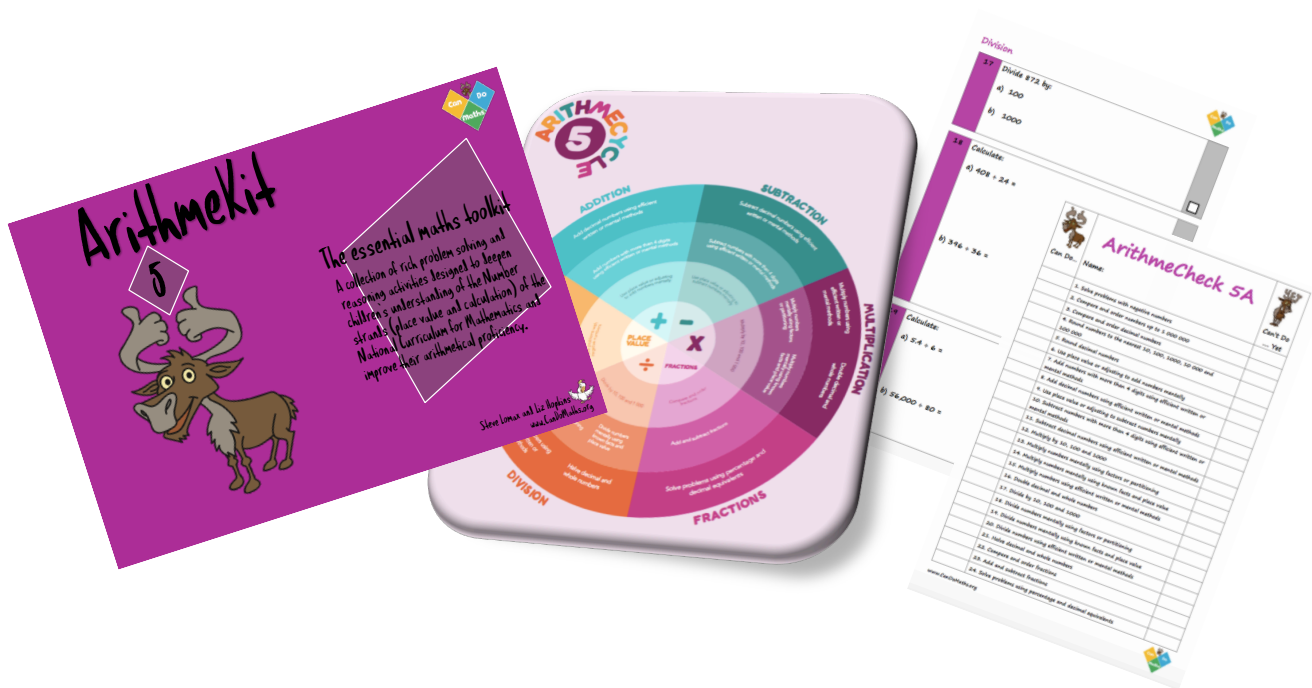


Answers




www.CanDoMaths.org

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AK5.1a

Name

Solve problems with negative numbers

| | | |
|----------------------------------|-------------------------------------|------------------------------------|
| $8 - 13 = -5$ | $-12 - 19 = -31$ | $5 - 9 < 10 - 16$ True or False |
| $22 - 37 = -15$ | $6 - 9 = -3$ | $4 - 12 = -8$ |
| $2 - 4 > 1 - 1$ True or False | $6 - 14 > 10 - 16$ True or False | $5 - 8 = -3$ |
| $8 - 21 = -13$ | $6 - 13 = -7$ | $-3 - 13 = -16$ |



AK5.1b

Name

Solve problems with negative numbers

| | | |
|------------------------------------|-----------------------------------|-------------------------------------|
| $5 - 13 = -8$ | $-2 - 7 = -9$ | $16 - 23 = -7$ |
| $12 - 17 = -5$ | $-7 - 3 = -10$ | $3 - 15 < 11 - 21$ True or False |
| $3 - 9 < 12 - 19$ True or False | $-3 - 6 = -9$ | $-4 - 11 = -15$ |
| $3 - 21 = -18$ | $2 - 9 > 6 - 14$ True or False | $6 - 13 = -7$ |



AK5.2a

Name

Compare and order numbers up to

1 000 000

| | | | | | |
|---------|---------|---------|---------|---------|---------|
| 23,455 | 23,327 | 432,589 | 568,996 | 123,478 | 122,678 |
| 23,587 | 23,465 | 678,954 | 576,344 | 144,356 | 133,783 |
| 63,568 | 63,687 | 674,321 | 546,756 | 23,457 | 12,456 |
| 63,623 | 63,528 | 546,893 | 667,899 | 34,576 | 13,867 |
| 458,786 | 435,654 | 867,985 | 868,933 | 19,687 | 19,587 |
| 412,546 | 439,598 | 863,574 | 864,312 | 19,488 | 19,335 |
| 313,423 | 323,456 | 67,938 | 67,855 | 99,989 | 99,899 |
| 300,509 | 300,356 | 67,945 | 67,456 | 99,786 | 99,876 |

Circle the largest number and cross out the smallest number



AK5.2b

Name

Compare and order numbers up to

1 000 000

| | | |
|----------|---------|---------|
| 54,321 | 943,267 | 13,456 |
| 58,432 | 945,123 | 13,566 |
| 435, 214 | 48,976 | 867,509 |
| 435, 617 | 49,234 | 873,689 |
| 74,649 | 762,349 | 187,989 |
| 75,733 | 786,321 | 190,345 |
| 76,324 | 135,978 | 28,987 |
| 78,543 | 136,002 | 29,345 |

Write a number that goes between each pair



A5.3a

Name

Compare and order decimal numbers

| | | |
|-------------------------------------|------------------------------------|----------------------------------|
| 6.11 6.23 6.403 6.544 | 7.65 7.896 7.983 7.986 | 14.354 14.46 14.54 14.9 |
| 4.008 4.07 4.553 4.576 | 5.75 56.7 56.08 56.346 | 16.25 16.34 16.45 16.87 |
| 9.678 9.86 9.867 9.876 | 5.053 5.055 5.505 5.55 | 2.235 2.265 2.453 2.479 |
| 15.678 15.768 15.89 15.897 | 52.3 52.312 52.321 52.342 | 7.634 7.659 7.702 7.865 |

Put each set of numbers in order



AK5.3b

Name

Compare and order decimal numbers

| | | |
|------------------|------------------|------------------|
| 23.567 23.876 | 56.7 58.7 | 12.208 13.012 |
| 3.5 3.6 | 0.568 0.586 | 234.6 235.4 |
| 48.004 48.103 | 13.867 13.878 | 6.007 7.006 |
| 54.2 57.8 | 19.034 19.1 | 45.33 45.486 |

Write a number that goes between each pair



AK5.4a

Name

Round numbers to the nearest 10, 100, 1000, 10 000
And 100 000



| | | |
|--|---|---|
| ...to the nearest 10 513.6 510 | ..to the nearest 10,000 34,674 30,000 | ..to the nearest 100,000 167,124 200,000 |
| ..to the nearest 10,000 543,398 540,000 | ...to the nearest 10 7827 7830 | ..to the nearest 10,000 365,832 370,000 |
| ..to the nearest 10,000 56,123 60,000 | ..to the nearest 10,000 1,634,781 1,630,000 | ..to the nearest 100,000 467, 567 500,000 |
| ..to the nearest 100,000 313,566 300,000 | ..to the nearest 1,000 534,398 534,000 | ..to the nearest 10,000 234,576 230,000 |

Round these numbers...



AK5.4b

Name

Round numbers to the nearest 10, 100, 1000, 10 000
And 100 000



| | | |
|--|--|--|
| ..to the nearest 10,000 43,675 40,000 | ..to the nearest 100,000 987,123 1,000,000 | ..to the nearest 100,000 817,985 800,000 |
| ..to the nearest 10,000 313,566 310,000 | ...to the nearest 1000 73,498 73,000 | ..to the nearest 10,000 401,899 400,000 |
| ..to the nearest 10,000 68,943 70,000 | ..to the nearest 10,000 656,214 660,000 | ..to the nearest 100,000 555,001 600,000 |
| ..to the nearest 100,000 566,342 600,000 | ..to the nearest 1,000 19,854 20,000 | ..to the nearest 10,000 364,392 360,000 |

Round these numbers...



AK5.5a

Name

Round decimal numbers

| | | |
|---|---|---|
| 3.45 to 1dp 3.5 | 36.78 to nearest tenth 36.8 | 15.6 to the nearest whole number 16 |
| 4.32 to nearest tenth 4.3 | 9.87 to nearest tenth 9.9 | 5.78 to 1dp 5.8 |
| 9.4 to the nearest whole number 9 | 15.63 to 1dp 15.6 | 9.12 to 1dp 9.1 |
| 12.65 to 1dp 12.7 | 8.5 to the nearest whole number 9 | 26.99 to nearest tenth 27.0 |

Round these numbers...



AK5.5b

Name

Round decimal numbers

| | | |
|---|---|-----------------------------------|
| 7.66 to 1dp 7.7 | 2.7 to the nearest whole number 3 | 24.32 to nearest tenth 24.3 |
| 41.78 to nearest tenth 41.8 | 8.96 to 1dp 9.0 | 16.87 to nearest tenth 16.9 |
| 8.6 to the nearest whole number 9 | 15.86 to 1dp 15.9 | 6.57 to 1dp 6.6 |
| 1.95 to 1dp 2.0 | 11.11 to nearest tenth 11.1 | 19.08 to 1dp 19.1 |

Round these numbers...



AK5.6a

Name



Use place value or adjusting to add numbers mentally.
(mentally means 'in your head' or 'with jottings'.)

| | | |
|----------------------------------|----------------------------------|----------------------------------|
| $125,700 + 97,000 =$ 222,700 | $345,670 + 37,000 =$ 382,670 | $543,986 + 29,000 =$ 572,986 |
| $546,329 + 98,000 =$ 644,329 | $123,900 + 103,000 =$ 226,900 | $235,981 + 105,000 =$ 340,981 |
| $623,894 + 198,000 =$ 821,894 | $878,878 + 102,000 =$ 980,878 | $473,998 + 19,000 =$ 492,998 |
| $333,291 + 48,000 =$ 381,291 | $129,840 + 49,000 =$ 178,840 | $324,756 + 95,000 =$ 419,756 |



AK5.6b

Name



Use place value or adjusting to add numbers mentally.
(mentally means 'in your head' or 'with jottings'.)

| | | |
|----------------------------------|---------------------------------|----------------------------------|
| $320,700 + 58,000 =$ 378,700 | $416,234 + 79,000 =$ 495,234 | $264,802 + 103,999 =$ 368,801 |
| $954,467 + 43,995 =$ 998,462 | $872,500 + 11,000 =$ 883,500 | $612,482 + 78,998 =$ 691,480 |
| $367,894 + 297,000 =$ 664,894 | $243,564 + 99,000 =$ 342,564 | $78,435 + 19,999 =$ 98,434 |
| $456,723 + 62,989 =$ 519,712 | $234,687 + 89,000 =$ 323,687 | $868,095 + 92,000 =$ 960,095 |



Name

AK5.7a

Add numbers with more than 4 digits using efficient written or mental methods (mentally means 'in your head' or 'with jottings'.)



| | | |
|------------------------------------|------------------------------------|--------------------------------------|
| $31\ 461 + 67\ 032 =$ 98 493 | $56\ 673 + 32\ 123 =$ 88 796 | $28\ 194 + 33\ 200 =$ 61 394 |
| $23\ 876 + 48\ 999 =$ 72 875 | $65\ 423 + 11\ 988 =$ 77 411 | $44\ 233 + 63\ 218 =$ 107 451 |
| $402\ 632 + 169\ 989 =$ 572 621 | $574\ 632 + 281\ 730 =$ 856 362 | $607\ 593 + 463\ 000 =$ 1 070 593 |
| $723\ 498 + 134\ 502 =$ 858 000 | $576\ 832 + 381\ 246 =$ 958 078 | $241\ 358 + 374\ 659 =$ 616 017 |



Name

AK5.7b

Add numbers with more than 4 digits using efficient written or mental methods (mentally means 'in your head' or 'with jottings'.)



| | | |
|----------------------------------|------------------------------------|--------------------------------------|
| $16\ 453 + 3996 =$ 20 449 | $97\ 995 + 13\ 006 =$ 111 001 | $49\ 182 + 44\ 233 =$ 93 415 |
| $76\ 832 + 57\ 684 =$ 134 516 | $30\ 465 + 18\ 989 =$ 49 454 | $34\ 242 + 82\ 136 =$ 116 378 |
| $751\ 632 + 6995 =$ 758 627 | $564\ 732 + 281\ 730 =$ 846 462 | $644\ 513 + 644\ 513 =$ 1 289 026 |
| $7428 + 439\ 500 =$ 446 928 | $576\ 000 + 2367 =$ 578 367 | $245\ 451 + 6549 =$ 252 000 |



AK5.8a

Name



Add decimal numbers using efficient written or mental methods (mentally means 'in your head' or 'with jottings'.)

| | | |
|-----------------------------|----------------------------|----------------------------|
| $9.672 + 5.67 =$ 15.342 | $4.32 + 4.65 =$ 8.97 | $3.45 + 8.867 =$ 12.317 |
| $4.684 + 2.34 =$ 7.024 | $4.632 + 4.065 =$ 8.697 | $3.405 + 8.9 =$ 12.305 |
| $6.708 + 3.999 =$ 10.707 | $3.3 + 6.789 =$ 10.089 | $4.05 + 6.809 =$ 10.859 |
| $4.52 + 3.49 =$ 8.01 | $8.006 + 3.42 =$ 11.426 | $5.062 + 5.67 =$ 10.732 |



AK5.8b

Name



Add decimal numbers using efficient written or mental methods (mentally means 'in your head' or 'with jottings'.)

| | | |
|-----------------------------|-----------------------------|----------------------------|
| $2.769 + 6.75 =$ 9.519 | $2.43 + 4.56 =$ 6.99 | $5.43 + 6.89 =$ 12.32 |
| $4.684 + 6.098 =$ 10.782 | $4.326 + 3.9 =$ 8.226 | $4.05 + 6.077 =$ 10.127 |
| $8.067 + 2.345 =$ 10.412 | $9.336 + 2.989 =$ 12.325 | $8.77 + 9.804 =$ 18.574 |
| $4.49 + 5.51 =$ 10 | $8.864 + 9.042 =$ 17.906 | $5.99 + 6.99 =$ 12.98 |



AK5.9a

Name



Use place value or adjusting to subtract numbers mentally (mentally means 'in your head' or 'with jottings'.)

| | | |
|------------------------------|------------------------------|-------------------------------|
| $197,250 - 99,999 = 97,251$ | $34,758 - 19,000 = 15,758$ | $345,215 - 19,000 = 326,215$ |
| $923,645 - 98,000 = 825,654$ | $867,988 - 39,000 = 828,988$ | $786,532 - 101,000 = 685,532$ |
| $894,657 - 58,000 = 836,657$ | $878,878 - 69,989 = 808,889$ | $676,676 - 39,000 = 637,676$ |
| $567,892 - 48,000 = 519,892$ | $279,840 - 19,990 = 259,850$ | $756,324 - 95,000 = 661,324$ |



AK5.9b

Name



Use place value or adjusting to subtract numbers mentally (mentally means 'in your head' or 'with jottings'.)

| | | |
|-------------------------------|------------------------------|------------------------------|
| $725,678 - 97,000 = 628,678$ | $567,304 - 27,000 = 540,304$ | $685,463 - 79,985 = 605,478$ |
| $400,502 - 79,050 = 321,452$ | $978,065 - 87,000 = 891,065$ | $500,145 - 69,000 = 431,145$ |
| $894,467 - 197,995 = 696,472$ | $765,423 - 69,000 = 696,423$ | $743,658 - 39,997 = 703,661$ |
| $798,291 - 68,000 = 730,291$ | $986,840 - 49,990 = 936,850$ | $247,546 - 27,000 = 220,546$ |



AK5.10a

Name

Subtract numbers with more than 4 digits using
efficient written or mental methods
(mentally means 'in your head' or 'with jottings'.)



| | | |
|----------------------------|----------------------------|----------------------------|
| $67,584 - 43,253 = 24,331$ | $70,005 - 56,982 = 13,023$ | $88,976 - 54,263 = 34,713$ |
| $88,997 - 30,008 = 58,989$ | $56,440 - 4339 = 52,101$ | $89,657 - 44,348 = 45,309$ |
| $99,550 - 54,349 = 45,201$ | $34,002 - 23,989 = 10,013$ | $45,003 - 34,921 = 10,082$ |
| $50,067 - 49,459 = 608$ | $98,706 - 54,738 = 43,968$ | $87,659 - 43,569 = 44,090$ |



AK5.10b

Name

Subtract numbers with more than 4 digits using
efficient written or mental methods
(mentally means 'in your head' or 'with jottings'.)



| | | |
|-------------------------------|-------------------------------|-------------------------------|
| $675,864 - 232,532 = 443,332$ | $896,578 - 256,399 = 640,179$ | $988,976 - 542,638 = 446,338$ |
| $66,940 - 32,530 = 34,410$ | $51,008 - 43,979 = 7029$ | $88,965 - 84,434 = 4531$ |
| $997,546 - 334,349 = 663,197$ | $578,650 - 334,103 = 244,547$ | $450,203 - 340,201 = 110,002$ |
| $67,007 - 66,459 = 548$ | $87,906 - 47,888 = 40,018$ | $870,059 - 69,969 = 800,090$ |



Name

AK5.11a

Subtract decimal numbers using efficient written or mental methods

(mentally means 'in your head' or 'with jottings'.)



| | | |
|---------------------|----------------------|----------------------|
| $6.77 - 5.3 = 1.47$ | $9.2 - 4.35 = 4.85$ | $8 - 5.6 = 2.4$ |
| $8.3 - 6.45 = 1.85$ | $7 - 4.03 = 2.97$ | $9.67 - 5.43 = 4.24$ |
| $9.04 - 3.7 = 5.34$ | $6.79 - 4.53 = 2.26$ | $4 - 2.56 = 1.44$ |
| $10 - 7.49 = 2.51$ | $6.99 - 3.45 = 3.54$ | $7.83 - 5.99 = 1.84$ |



Name

AK5.11b

Subtract decimal numbers using efficient written or mental methods

(mentally means 'in your head' or 'with jottings'.)



| | | |
|---------------------|----------------------|----------------------|
| $8.7 - 3.5 = 5.2$ | $2.96 - 1.35 = 1.61$ | $8 - 3.4 = 4.6$ |
| $8.88 - 3.3 = 5.58$ | $4.6 - 1.35 = 3.25$ | $7 - 3.6 = 3.4$ |
| $7.2 - 5.4 = 1.8$ | $6.9 - 1.32 = 5.58$ | $8.46 - 4.07 = 4.39$ |
| $8.8 - 5.93 = 2.87$ | $3.8 - 1.09 = 2.71$ | $9 - 6.73 = 2.27$ |



AK5.12a

Name

Multiply by 10, 100, and 1000

| | | |
|---------------------------------|--------------------------------|--------------------------------|
| $56,789 \times 10 =$ 567,890 | $6.78 \times 100 = 678$ | $13.4 \times 1000 =$ 13,400 |
| $5.67 \times 100 = 567$ | $43.56 \times 10 = 435.6$ | $0.67 \times 1000 = 670$ |
| $0.04 \times 10 = 0.4$ | $34.6 \times 1000 =$ 34,600 | $6.78 \times 100 = 678$ |
| $36.7 \times 1000 =$ 36,700 | $124 \times 100 = 12,400$ | $0.09 \times 10 = 0.9$ |



AK5.12b

Name

Multiply by 10, 100, and 1000

| | | |
|---------------------------------|---------------------------------|------------------------------|
| $789.64 \times 10 =$ 7896.4 | $7.82 \times 100 = 782$ | $3.49 \times 1000 =$ 3490 |
| $27.6 \times 100 = 2760$ | $0.9 \times 10 = 9$ | $2.34 \times 1000 = 2340$ |
| $167 \times 10 = 1670$ | $45.87 \times 1000 =$ 45,870 | $0.987 \times 100 = 98.7$ |
| $34.02 \times 1000 =$ 34,020 | $56.7 \times 100 = 5670$ | $67.09 \times 10 = 670.9$ |



AK5.13a

Name



Multiply numbers mentally using factors or partitioning (mentally means 'in your head' or 'with jottings'.)

| | | |
|-----------------------|-----------------------|----------------------|
| $28 \times 14 = 392$ | $32 \times 18 = 576$ | $16 \times 24 = 384$ |
| $27 \times 36 = 972$ | $12 \times 48 = 576$ | $24 \times 25 = 600$ |
| $42 \times 35 = 1470$ | $48 \times 22 = 1056$ | $30 \times 24 = 720$ |
| $66 \times 8 = 528$ | $16 \times 9 = 144$ | $60 \times 8 = 480$ |



AK5.13b

Name



Multiply numbers mentally using factors or partitioning (mentally means 'in your head' or 'with jottings'.)

| | | |
|-----------------------|-----------------------|----------------------|
| $32 \times 14 = 448$ | $25 \times 18 = 450$ | $36 \times 8 = 288$ |
| $72 \times 24 = 1728$ | $18 \times 16 = 288$ | $14 \times 22 = 308$ |
| $81 \times 12 = 972$ | $96 \times 24 = 2304$ | $32 \times 8 = 256$ |
| $42 \times 16 = 672$ | $15 \times 8 = 120$ | $48 \times 12 = 576$ |



AK5.14a

Name



Multiply numbers mentally using known facts and place value (mentally means 'in your head' or 'with jottings').

| | | |
|---------------------------|---------------------------|-------------------------|
| $0.3 \times 6 = 1.8$ | $1.2 \times 40 = 48$ | $4.8 \times 200 = 960$ |
| $60 \times 0.05 = 3$ | $500 \times 0.8 = 400$ | $2.8 \times 2 = 5.6$ |
| $0.02 \times 50 = 1$ | $0.07 \times 80 = 5.6$ | $0.04 \times 400 = 16$ |
| $0.09 \times 0.2 = 0.018$ | $3.6 \times 0.02 = 0.072$ | $11 \times 0.07 = 0.77$ |



AK5.14b

Name



Multiply numbers mentally using known facts and place value (mentally means 'in your head' or 'with jottings').

| | | |
|---------------------------|--------------------------|-------------------------|
| $0.8 \times 4 = 3.2$ | $1.4 \times 50 = 70$ | $6.4 \times 20 = 128$ |
| $120 \times 0.03 = 3.6$ | $400 \times 0.06 = 24$ | $5.6 \times 0.2 = 1.12$ |
| $0.02 \times 60 = 1.2$ | $0.06 \times 80 = 4.8$ | $0.04 \times 800 = 32$ |
| $0.9 \times 0.03 = 0.027$ | $2.4 \times 0.05 = 0.12$ | $12 \times 0.09 = 1.08$ |



AK5.15a

Name

Multiply numbers using efficient written or mental methods (mentally means 'in your head' or 'with jottings'.)



| | | |
|---------------------------|---------------------------|--------------------------|
| $27 \times 99 = 2673$ | $122 \times 25 = 3050$ | $34 \times 29 = 986$ |
| $476 \times 49 = 23,324$ | $897 \times 59 = 52,923$ | $5.67 \times 40 = 226.8$ |
| $87.2 \times 30 = 2616$ | $6.89 \times 19 = 130.91$ | $346 \times 22 = 7612$ |
| $5436 \times 15 = 81,540$ | $7.5 \times 40 = 300$ | $283.4 \times 25 = 7085$ |



AK5.15b

Name

Multiply numbers using efficient written or mental methods (mentally means 'in your head' or 'with jottings'.)



| | | |
|---------------------------|--------------------------|--------------------------|
| $256 \times 99 = 25,344$ | $122 \times 50 = 6100$ | $36 \times 21 = 756$ |
| $34.6 \times 19 = 657.4$ | $378 \times 0.3 = 113.4$ | $4.93 \times 30 = 147.9$ |
| $456 \times 0.2 = 91.2$ | $5.23 \times 19 = 99.37$ | $998 \times 44 = 43,912$ |
| $2923 \times 15 = 43,845$ | $68 \times 40 = 2720$ | $16.5 \times 25 = 412.5$ |



AK5.16a

Name

Double decimal and whole numbers

| | | |
|----------------|-------------------|-----------------|
| 26.8 53.6 | 9.7 19.4 | 234.5 469 |
| 867 1734 | 45.9 91.8 | 68.07 136.14 |
| 345.1 690.2 | 743.09 1486.18 | 86.02 172.04 |
| 4421 8842 | 6784 13,568 | 987.4 1974.8 |

Double the numbers



AK5.16b

Name

Double decimal and whole numbers

| | | |
|----------------|-------------------|------------------|
| 43.6 87.2 | 96.5 193 | 436.72 873.44 |
| 746 1492 | 7.2 14.4 | 65.04 130.08 |
| 387.2 774.4 | 587.93 1175.86 | 79.53 159.06 |
| 9784 19,568 | 7786 15,572 | 576.9 1153.8 |

Double the numbers



AK5.17a

Name

Divide by 10, 100 and 1000

| | | |
|----------------------------|--------------------------|------------------------------|
| $6709 \div 100 = 67.09$ | $4560 \div 1000 = 4.56$ | $34.5 \div 10 = 3.45$ |
| $678,900 \div 10 = 67,890$ | $39,600 \div 100 = 396$ | $567,890 \div 1000 = 567.89$ |
| $2345 \div 1000 = 2.345$ | $86.7 \div 10 = 8.67$ | $345.2 \div 100 = 3.452$ |
| $2978 \div 1000 = 2.978$ | $586.3 \div 100 = 5.863$ | $456 \div 100 = 4.56$ |



AK5.17b

Name

Divide by 10, 100 and 1000

| | | |
|-------------------------------|-----------------------------|-------------------------------|
| $56,790 \div 100 = 567.9$ | $435,600 \div 1000 = 435.6$ | $34.7 \div 10 = 3.47$ |
| $56.9 \div 10 = 5.69$ | $439.7 \div 100 = 4.397$ | $234,568 \div 1000 = 234.568$ |
| $867,432 \div 1000 = 867.432$ | $876 \div 10 = 87.6$ | $9800 \div 100 = 98$ |
| $56,000 \div 1000 = 56$ | $567 \div 100 = 5.67$ | $3.4 \div 100 = 0.034$ |



AK5.18a

Name

Divide numbers mentally using factors

or partitioning (mentally means 'in your head' or 'with jottings'.)



| | | |
|-------------------------|-------------------------|----------------------------|
| $32,000 \div 160 = 200$ | $1200 \div 24 = 50$ | $720 \div 45 = 16$ |
| $2400 \div 80 = 30$ | $4800 \div 30 = 160$ | $108,000 \div 36 = 3000$ |
| $500 \div 25 = 20$ | $7200 \div 18 = 400$ | $810,000 \div 27 = 30,000$ |
| $96,000 \div 15 = 6400$ | $32,000 \div 160 = 200$ | $9,900 \div 33 = 300$ |



AK5.18b

Name

Divide numbers mentally using factors

or partitioning (mentally means 'in your head' or 'with jottings'.)



| | | |
|--------------------|--------------------|--------------------|
| $480 \div 24 = 20$ | $630 \div 42 = 15$ | $540 \div 18 = 30$ |
| $640 \div 16 = 40$ | $810 \div 27 = 30$ | $930 \div 15 = 62$ |
| $280 \div 35 = 8$ | $168 \div 24 = 7$ | $540 \div 45 = 12$ |
| $288 \div 12 = 24$ | $490 \div 14 = 35$ | $560 \div 28 = 20$ |



AK5.19a

Name



Divide numbers mentally using known facts and place value (mentally means 'in your head' or 'with jottings'.)

| | | |
|---------------------------|-----------------------------|------------------------------|
| $144,000 \div 120 = 1200$ | $720 \div 0.9 = 800$ | $36,000 \div 0.04 = 900,000$ |
| $560 \div 0.8 = 700$ | $48,000 \div 600 = 80$ | $280 \div 0.07 = 4000$ |
| $42,000 \div 60 = 700$ | $60,000 \div 0.5 = 120,000$ | $630,000 \div 70 = 9000$ |
| $108,000 \div 900 = 120$ | $1440 \div 0.12 = 12,000$ | $27,000 \div 0.03 = 900,000$ |



AK5.19b

Name



Divide numbers mentally using known facts and place value (mentally means 'in your head' or 'with jottings'.)

| | | |
|---------------------------|---------------------------|----------------------------|
| $288,000 \div 1200 = 240$ | $63,000 \div 70 = 900$ | $1600 \div 0.04 = 40,000$ |
| $210,000 \div 30 = 7000$ | $990,000 \div 110 = 9000$ | $35,000 \div 0.5 = 70,000$ |
| $36,000 \div 90 = 400$ | $4.5 \div 0.05 = 90$ | $84,000 \div 120 = 700$ |
| $360 \div 300 = 1.2$ | $440 \div 0.11 = 4000$ | $80 \div 400 = 0.2$ |



AK5.20a

Name

Divide numbers using efficient written or mental methods (mentally means 'in your head' or 'with jottings')



| | | |
|-------------------------|----------------------------|-----------------------|
| $345 \div 1.5 = 230$ | $2648 \div 4 = 662$ | $64395 \div 9 = 7155$ |
| $12,360 \div 40 = 309$ | $1320 \div 12 = 110$ | $573 \div 15 = 38.2$ |
| $12,100 \div 11 = 1100$ | $281,637 \div 90 = 3129.3$ | $26.19 \div 9 = 2.91$ |
| $867.5 \div 5 = 173.5$ | $23,450 \div 70 = 335$ | $12.1 \div 1.1 = 11$ |



AK5.20b

Name

Divide numbers using efficient written or mental methods (mentally means 'in your head' or 'with jottings')



| | | |
|----------------------------|------------------------|----------------------------|
| $2897 \div 5 = 579.4$ | $5663 \div 7 = 809$ | $34,569 \div 9 = 3841$ |
| $96,000 \div 1.2 = 80,000$ | $42,496 \div 8 = 5312$ | $5648 \div 20 = 282.4$ |
| $280,000 \div 40 = 7000$ | $428 \div 0.2 = 2140$ | $7494 \div 6 = 1249$ |
| $354.2 \div 7 = 50.6$ | $0.245 \div 5 = 0.049$ | $24,900 \div 1.2 = 20,750$ |



AK5.21a

Name

Halve decimal and whole numbers

| | | |
|-------------------|-----------------|------------------|
| 16.8 8.4 | 45.2 22.6 | 98.4 49.2 |
| 682.57 341.285 | 8.45 4.225 | 76 730 38,365 |
| 78.46 39.23 | 59.87 29.935 | 12.21 6.105 |
| 14.14 7.07 | 342.8 171.4 | 6.86 3.43 |

Halve the numbers



AK5.21b

Name

Halve decimal and whole numbers

| | | |
|-------------------|-----------------|----------------|
| 140.5 70.25 | 35 246 17623 | 925.2 462.6 |
| 573.8 286.9 | 12.45 6.225 | 9.07 4.535 |
| 786.3 393.15 | 528 264 | 36.36 18.18 |
| 789.43 394.715 | 50.01 25.005 | 57.3 28.65 |

Halve the numbers



AK5.22a

Name

Compare and order fractions



| | | |
|--|---|---|
| $\frac{11}{12} = \frac{33}{36}$ | $\frac{1}{5} = \frac{7}{35}$ | $\frac{2}{7} = \frac{12}{42}$ |
| Order these $\frac{11}{16}$ $\frac{4}{6}$ $\frac{5}{12}$ c b a | $\frac{4}{5} = \frac{20}{25}$ | $\frac{6}{7} = \frac{54}{63}$ |
| Order these $\frac{3}{4}$ $\frac{5}{8}$ $\frac{6}{12}$ c b a | Order these $\frac{7}{15}$ $\frac{4}{10}$ $\frac{2}{5}$ c a a | Order these $\frac{11}{12}$ $\frac{10}{24}$ $\frac{5}{6}$ c a b |
| $\frac{8}{7} = \frac{56}{49}$ | Order these $\frac{2}{3}$ $\frac{5}{6}$ $\frac{7}{9}$ a c b | $\frac{3}{7} = \frac{9}{21}$ |

Put them in order or fill in the missing number to make them equal



AK5.22b

Name

Compare and order fractions



| | | |
|---|--|--|
| $\frac{3}{10} > \frac{4}{5}$ True or false | $\frac{7}{10} > \frac{6}{12}$ True or false | $\frac{12}{48} < \frac{12}{24}$ True or false |
| $\frac{1}{5} > \frac{2}{7}$ True or false | $\frac{6}{18} > \frac{4}{6}$ True or false | $\frac{5}{16} < \frac{3}{10}$ True or false |
| $\frac{3}{5} < \frac{4}{7}$ True or false | $\frac{3}{11} > \frac{4}{12}$ True or false | $\frac{4}{11} > \frac{3}{5}$ True or false |
| $\frac{6}{7} > \frac{5}{6}$ True or false | $\frac{6}{8} > \frac{4}{6}$ True or false | $\frac{2}{9} < \frac{3}{10}$ True or false |



AK5.23a

Name

Add and subtract fractions



| | | |
|---|---|--|
| $\frac{4}{10} - \frac{1}{5} = \frac{2}{10}$ | $\frac{8}{12} + \frac{4}{6} = \frac{16}{12}$ | $\frac{11}{12} - \frac{3}{4} = \frac{2}{12}$ |
| $\frac{14}{24} + \frac{7}{8} = \frac{35}{24}$ | $\frac{5}{6} + \frac{2}{3} = \frac{9}{6}$ | $\frac{13}{20} - \frac{3}{5} = \frac{1}{20}$ |
| $\frac{22}{24} - \frac{1}{4} = \frac{16}{24}$ | $\frac{15}{20} + \frac{3}{5} = \frac{27}{20}$ | $\frac{6}{8} + \frac{1}{2} = \frac{10}{8}$ |
| $\frac{14}{36} - \frac{4}{12} = \frac{2}{36}$ | $\frac{3}{8} - \frac{1}{4} = \frac{1}{8}$ | $\frac{7}{9} - \frac{1}{3} = \frac{4}{9}$ |



AK5.23b

Name

Add and subtract fractions



| | | |
|---|---|--|
| $\frac{3}{16} - \frac{1}{4} = \frac{1}{16}$ | $\frac{7}{12} - \frac{1}{3} = \frac{3}{12}$ | $\frac{11}{20} + \frac{3}{10} = \frac{17}{20}$ |
| $\frac{12}{18} + \frac{5}{6} = \frac{27}{18}$ | $\frac{1}{6} + \frac{2}{3} = \frac{5}{6}$ | $\frac{13}{24} + \frac{3}{8} = \frac{22}{24}$ |
| $\frac{12}{24} - \frac{3}{12} = \frac{3}{12}$ | $\frac{18}{20} - \frac{2}{5} = \frac{10}{20}$ | $\frac{4}{5} - \frac{1}{2} = \frac{3}{10}$ |
| $\frac{16}{20} + \frac{3}{5} = \frac{28}{20}$ | $\frac{3}{8} - \frac{1}{4} = \frac{1}{8}$ | $\frac{4}{9} + \frac{2}{3} = \frac{10}{9}$ |



AK5.24a

Name

Solve problems using percentage and decimal equivalents



| | | |
|--------------------------------|--------------------------|--|
| 0.37 as a percentage 37% | 67% as a decimal 0.67 | $\frac{3}{4}$ as a percentage 75% |
| 0.46 as a percentage 46% | 12% as a decimal 0.12 | $\frac{1}{5}$ as a percentage 20% |
| 0.7 as a percentage 70% | 6% as a decimal 0.06 | $\frac{3}{8}$ as a percentage 37.5% |
| 0.125 as a percentage 12.5% | 15% as a decimal 0.15 | $\frac{7}{10}$ as a percentage 70% |

Write the equivalent



AK5.24b

Name

Solve problems using percentage and decimal equivalents



| | | |
|-----------------------------|--------------------------|--|
| 0.47 as a percentage 47% | 46% as a decimal 0.46 | $\frac{1}{4}$ as a percentage 25% |
| 0.97 as a percentage 97% | 72% as a decimal 0.72 | $\frac{3}{5}$ as a percentage 60% |
| 0.05 as a percentage 5% | 2% as a decimal 0.02 | $\frac{5}{8}$ as a percentage 67.5% |
| 0.1 as a percentage 10% | 27% as a decimal 0.27 | $\frac{9}{10}$ as a percentage 90% |

Write the equivalent

