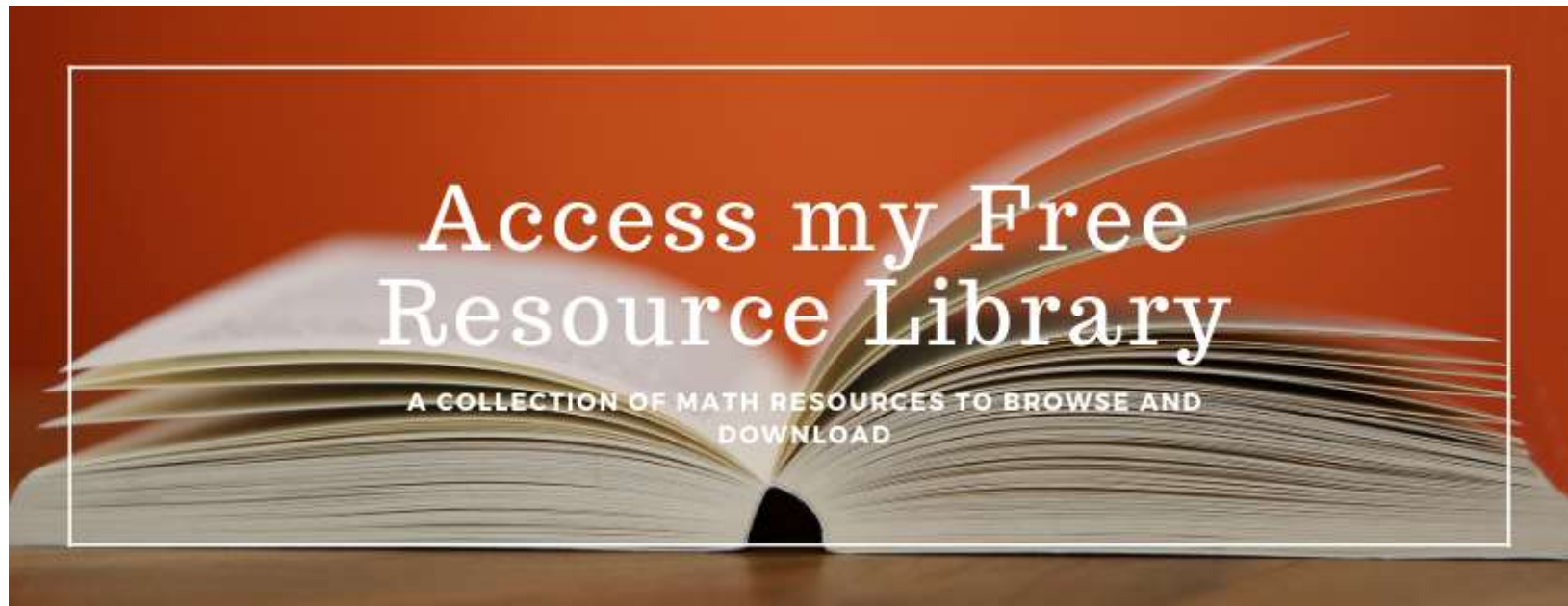


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Adding Fractions

Codebreaker



A	B	C	D	E	F	G	H	I	J	K	L	M
$\frac{5}{6}$	$\frac{17}{21}$	$\frac{7}{8}$	$\frac{5}{14}$	$\frac{3}{8}$	$\frac{2}{3}$	$\frac{2}{9}$	$\frac{7}{10}$	$\frac{2}{7}$	$\frac{19}{24}$	$\frac{11}{12}$	$\frac{1}{3}$	$\frac{5}{7}$
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
$\frac{1}{2}$	$\frac{3}{7}$	$\frac{7}{9}$	$\frac{2}{5}$	$\frac{3}{4}$	$\frac{3}{10}$	$\frac{13}{15}$	$\frac{5}{12}$	$\frac{7}{12}$	$\frac{11}{28}$	$\frac{13}{16}$	$\frac{7}{18}$	$\frac{6}{11}$

Work out the questions below, simplify where necessary. Match your answer to a letter in the table above to complete the code in the five boxes at the bottom.

1 $\frac{2}{7} + \frac{3}{7}$

2 $\frac{1}{8} + \frac{5}{8}$

3 $\frac{1}{3} + \frac{1}{6}$

4 $\frac{1}{3} + \frac{1}{4}$

5 $\frac{2}{5} + \frac{3}{10}$

6 $\frac{2}{3} + \frac{1}{4}$

7 $\frac{3}{4} + \frac{1}{8}$

8 $\frac{1}{2} + \frac{1}{3}$

9 $\frac{1}{3} + \frac{4}{9}$

10 $\frac{4}{15} + \frac{2}{5}$

11 $\frac{5}{12} + \frac{3}{8}$

12 $\frac{3}{16} + \frac{5}{8}$

13 $\frac{2}{3} + \frac{1}{5}$

14 $\frac{3}{7} + \frac{8}{21}$

15 $\frac{1}{6} + \frac{2}{15}$



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



SOLUTION

Adding Fractions Codebreaker

A	B	C	D	E	F	G	H	I	J	K	L	M
$\frac{5}{6}$	$\frac{17}{21}$	$\frac{7}{8}$	$\frac{5}{14}$	$\frac{3}{8}$	$\frac{2}{3}$	$\frac{2}{9}$	$\frac{7}{10}$	$\frac{2}{7}$	$\frac{19}{24}$	$\frac{11}{12}$	$\frac{1}{3}$	$\frac{5}{7}$
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
$\frac{1}{2}$	$\frac{3}{7}$	$\frac{7}{9}$	$\frac{2}{5}$	$\frac{3}{4}$	$\frac{3}{10}$	$\frac{13}{15}$	$\frac{5}{12}$	$\frac{7}{12}$	$\frac{11}{28}$	$\frac{13}{16}$	$\frac{7}{18}$	$\frac{6}{11}$

Work out the questions below, simplify where necessary. Match your answer to a letter in the table above to complete the code in the five boxes at the bottom.

1 $\frac{2}{7} + \frac{3}{7}$
 $\frac{5}{7}$

2 $\frac{1}{8} + \frac{5}{8}$
 $\frac{3}{4}$

3 $\frac{1}{3} + \frac{1}{6}$
 $\frac{1}{2}$

4 $\frac{1}{3} + \frac{1}{4}$
 $\frac{7}{12}$

5 $\frac{2}{5} + \frac{3}{10}$
 $\frac{7}{10}$

6 $\frac{2}{3} + \frac{1}{4}$
 $\frac{11}{12}$

7 $\frac{3}{4} + \frac{1}{8}$
 $\frac{7}{8}$

8 $\frac{1}{2} + \frac{1}{3}$
 $\frac{5}{6}$

9 $\frac{1}{3} + \frac{4}{9}$
 $\frac{7}{9}$

10 $\frac{4}{15} + \frac{2}{5}$
 $\frac{2}{3}$

11 $\frac{5}{12} + \frac{3}{8}$
 $\frac{19}{24}$

12 $\frac{3}{16} + \frac{5}{8}$
 $\frac{13}{16}$

13 $\frac{2}{3} + \frac{1}{5}$
 $\frac{13}{15}$

14 $\frac{3}{7} + \frac{8}{21}$
 $\frac{17}{21}$

15 $\frac{1}{6} + \frac{2}{15}$
 $\frac{3}{10}$



M-R-N

V-H-K

C-A-P

F-J-X

T-B-S



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SIMPLIFYING EXPRESSIONS PUZZLE

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Simplifying Expressions Code Breaker

Simplifying Expressions Codebreaker

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
100	1000	10000	100000	1000000	10000000	100000000	1000000000	10000000000	100000000000	1000000000000	10000000000000	100000000000000

Solve the equations below. Match your answer to a letter in the table above to complete the code in the first boxes at the bottom.

1. $4x + 3x + 2x = 7x + 7$ 2. $3x + 4x + x = 8x$ 3. $2x + 3x + 2x + 2x = 12x + 2x + 4$
 4. $5x + 5x = 10x$ 5. $8y + 7y = 15y$ 6. $10x - 7x + 2x = 5x$ 7. $4x + 3x + 2x = 9x$ 8. $3x + 2x = 5x$
 9. $10x + 10x = 20x$ 10. $10x + 10x = 20x$ 11. $10x + 10x = 20x$ 12. $10x + 10x = 20x$ 13. $10x + 10x = 20x$
 14. $10x + 10x = 20x$ 15. $10x + 10x = 20x$ 16. $10x + 10x = 20x$ 17. $10x + 10x = 20x$ 18. $10x + 10x = 20x$

T P - E - Z H - R - N L - A - C J - F - G K - D - T

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<https://tentorsmath.com/simplifying-expressions-activity/>

CALCULATIONS WITH DECIMALS PUZZLE

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Calculations with Decimals Code Breaker

Calculation with Decimals Codebreaker

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
100	1000	10000	100000	1000000	10000000	100000000	1000000000	10000000000	100000000000	1000000000000	10000000000000	100000000000000

Solve the equations below. Match your answer to a letter in the table above to complete the code in the first boxes at the bottom.

1. $1.5 \times 30 = 45$ 2. $20 \times 0.5 = 10$ 3. $3.2 + 2.4 = 5.6$ 4. $5.8 - 3.1 = 2.7$ 5. $15 \div 5 = 3$
 6. $15 \div 0.5 = 30$ 7. $15 \div 0.05 = 300$ 8. $4 \times 0.25 = 1$ 9. $5 \times 0.4 = 2$ 10. $86 + 2.3 = 88.3$
 11. $7.7 + 2.5 = 10.2$ 12. $16.8 + 5.7 = 22.5$ 13. $1.5 = 0.0005 \times 3000$ 14. $0.5 \times 2.5 = 1.25$ 15. $0.2 \times 64 = 12.8$
 16. $100 \div 10 = 10$ 17. $1000 \div 100 = 10$ 18. $10000 \div 1000 = 10$ 19. $100000 \div 10000 = 10$ 20. $1000000 \div 100000 = 10$

T C - H - P M - B - L T - A - N Q - E - Z J - O - Y

Ten-Ten Math

<https://tentorsmath.com/calculations-with-decimals>

SOLVING TWO STEP EQUATIONS PUZZLE

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Solving Equations CODE BREAKER GAME

Solving Equations Code Breaker

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
100	1000	10000	100000	1000000	10000000	100000000	1000000000	10000000000	100000000000	1000000000000	10000000000000	100000000000000

Solve the equations below. Match your answer to a letter above to complete the code in the first boxes at the bottom.

1. $3x + 5 = 16$ 2. $3x - 13 = 23$ 3. $4x - 19 = 1$ 4. $2x + 8 = 24$ 5. $x = 3$ 6. $x = 12$ 7. $x = 5$ 8. $x = 8$
 9. $2x + 6 = 24$ 10. $8x + 7 = 15$ 11. $2x - 11 = 15$ 12. $x + 3 = 5$ 13. $x = 10$
 14. $x = 4$ 15. $x = 18$ 16. $x = 20$ 17. $x = 27$ 18. $x = 2$ 19. $x = 8$ 20. $x = 30$

T S - B - P X - T - C G - M - K Z - A - F

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DECIMALS TO FRACTIONS PUZZLE

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Decimals to Fractions Code Breaker

Decimals to Fractions Codebreaker

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
100	1000	10000	100000	1000000	10000000	100000000	1000000000	10000000000	100000000000	1000000000000	10000000000000	100000000000000

Convert the decimals below to fractions. Simplify each one. Match your answer to a letter in the table above to complete the code in the first boxes at the bottom.

1. $0.7 = \frac{7}{10}$ 2. $0.4 = \frac{2}{5}$ 3. $0.5 = \frac{5}{10}$ 4. $0.93 = \frac{93}{100}$ 5. $0.03 = \frac{3}{100}$
 6. $0.07 = \frac{7}{100}$ 7. $0.25 = \frac{25}{100}$ 8. $0.75 = \frac{75}{100}$ 9. $0.21 = \frac{21}{100}$ 10. $0.48 = \frac{48}{100}$
 11. $0.04 = \frac{4}{100}$ 12. $0.05 = \frac{5}{100}$ 13. $0.12 = \frac{12}{100}$ 14. $0.83 = \frac{83}{100}$ 15. $0.35 = \frac{35}{100}$
 16. $0.2 = \frac{20}{100}$ 17. $0.1 = \frac{10}{100}$ 18. $0.01 = \frac{1}{100}$ 19. $0.001 = \frac{1}{1000}$ 20. $0.0001 = \frac{1}{10000}$

T G - K - Z P - W - N C - A - L F - R - X V - B - T

Ten-Ten Math

<https://tentorsmath.com/decimals-to-fractions-activity>

Some more code-breakers you may like! (click the link)

Multiplying Decimals CODE BREAKER GAME

Multiplying Decimals Code Breaker

A	B	C	D	E	F	G	H	I	J	K	L	M
2.302	0.547	15.8	1.033	0.476	3.88	6.103	1.08	1.442	0.707	0.12	0.63	0.018
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1.23	0.0416	0.779	4.23	8.57	3.146	12.4	16.2	5.4	0.0057	49	0.086	0.573

Work out the decimal multiplications, link your answers to the table above to complete the code in the four boxes at the bottom:

- 9.2×5
46
- 3.6×4
14.4
- 7.9×2
15.8
- 0.4×0.3
0.12
- 0.7×0.9
0.63
- 0.03×0.6
0.0018
- 0.05×0.07
0.0035
- 3.6×0.3
1.08
- 7.4×0.006
0.0444
- 8.7×7.9
68.73
- 0.14×3.4
0.476
- 0.74×0.24
0.1776

X-T-C **K-L-M** **W-H-O** **Z-E-P**

Ten Tors Math

[Multiplying Decimals](#)

GCF and LCM CODE BREAKER GAME

GCF and LCM Code Breaker

A	B	C	D	E	F	G	H	I	J	K	L	M
3	7	25	12	11	34	39	45	69	14	16	29	31
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
55	150	84	15	9	10	30	66	6	13	11	0	8

Find the GCF or LCM for these questions, link them to the table above to complete the code in the four boxes at the bottom:

- GCF of 18 and 30
6
- GCF of 25 and 60
5
- GCF of 36 and 90
18
- LCM of 8 and 12
24
- LCM of 10 and 60
60
- GCF of 16, 32 and 40
8
- LCM of 21 and 28
84
- LCM of 2, 6 and 11
66
- GCF of 36, 60 and 84
12
- GCF of 75 and 350
25
- LCM of 50 and 75
150
- GCF of 39 and 52
13

V-A-X **F-I-Z** **P-U-D** **C-O-W**

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[GCF LCM](#)

PRIME FACTOR FORM CODE BREAKER GAME

Prime Number Code Breaker

A	B	C	D	E	F	G	H	I	J	K	L	M
$2^2 \times 3$	$2^2 \times 3^2$	$2^2 \times 3^3$	$2^2 \times 3^4$	$2^2 \times 3^5$	$2^2 \times 3^6$	$2^2 \times 3^7$	$2^2 \times 3^8$	$2^2 \times 3^9$	$2^2 \times 3^{10}$	$2^2 \times 3^{11}$	$2^2 \times 3^{12}$	$2^2 \times 3^{13}$
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
$2^3 \times 3^2$	$2^3 \times 3^3$	$2^3 \times 3^4$	$2^3 \times 3^5$	$2^3 \times 3^6$	$2^3 \times 3^7$	$2^3 \times 3^8$	$2^3 \times 3^9$	$2^3 \times 3^{10}$	$2^3 \times 3^{11}$	$2^3 \times 3^{12}$	$2^3 \times 3^{13}$	$2^3 \times 3^{14}$

Write the numbers below as a product of primes, link them to the table above to complete the code in the four boxes at the bottom:

- 140
 $2^2 \times 5 \times 7$
- 168
 $2^3 \times 3 \times 7$
- 550
 $2 \times 5^2 \times 11$
- 210
 $2 \times 3 \times 5 \times 7$
- 336
 $2^4 \times 3 \times 7$
- 2625
 $3 \times 5^3 \times 7$
- 306
 $2 \times 3^3 \times 17$
- 735
 $3 \times 5 \times 7^2$
- 1144
 $2^3 \times 11 \times 13$
- 396
 $2^2 \times 3^3 \times 11$
- 6006
 $2 \times 3 \times 7 \times 11 \times 13$
- 484
 $2^2 \times 11^2$

Z-O-M **B-A-G** **L-I-D** **X-E-C**

Ten Tors Math

[Prime Factors](#)

Multiplying Integers CODE BREAKER GAME

Multiplying Integers Code Breaker

A	B	C	D	E	F	G	H	I	J	K	L	M
198	192	170	292	258	358	122	360	144	244	107	178	284
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
498	138	266	145	364	286	272	440	68	254	81	118	606

Simplify the expressions above, link them to the answers in the table above to complete the code in the four boxes at the bottom:

- 3×27
81
- 6×43
258
- 2×89
178
- 5×34
170
- 3×66
198
- 4×73
292
- 2×96
192
- 7×52
364
- 6×23
138
- 6×83
498
- 8×18
144
- 7×38
266

X-E-L **C-A-D** **B-R-O** **N-I-P**

Ten Tors Math

[Multiplying Integers](#)

Add & Subtract Decimals CODE BREAKER GAME

Adding & Subtracting Decimals Code Breaker

A	B	C	D	E	F	G	H	I	J	K	L	M
14.24	2.69	17.31	3.1	13.84	41.3	19.34	9.26	8.82	6.66	15.14	14.57	17.08
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14.21	2.908	1.79	4.11	9.71	9.87	2.65	18.11	3.6	24.79	40.29	12.66	10.17

Work out the decimal sums below, link your answers to the table above to complete the code in the four boxes at the bottom:

- $10.63 + 6.7$
17.33
- $3.271 + 6.1$
9.371
- $0.668 + 3.04$
3.708
- $2.472 + 16.7$
19.172
- $14.52 - 6.5$
8.02
- $46.5 - 6.21$
40.29
- $6.73 - 0.124$
6.606
- $4.83 + 9.74$
14.57
- $3.33 - 2.46$
0.87
- $2.75 + 11.46$
14.21
- $6.72 - 4.93$
1.79
- $4.8 - 0.69$
4.11

C-R-M **Z-I-X** **J-L-S** **N-P-Q**

Ten Tors Math

[Add Subtract Decimals](#)

Percentage of an Amount CODE BREAKER GAME

Percentage of a Quantity Codebreaker

A	B	C	D	E	F	G	H	I	J	K	L	M
66	87	3.5	88	40	348	175	30	28	360	56	12	189
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
100.4	100	217	13	55	246	78	198	60	86	12	22	11

Answer each question, simplify where possible. Where relevant, leave your answer as an improper fraction. Link your answer to the table above to complete the code in the four boxes at the bottom:

- 50% of 24
12
- 25% of 120
30
- 80% of 450
360
- 35% of 620
217
- 15% of 440
66
- 27% of 700
189
- 11% of 800
88
- 5% of 260
13
- 80% of 70
56
- 65% of 120
78
- 2% of 140
2.8
- 56% of 340
190.4
- 2.5% of 7000
175
- 33% of 600
198
- 40% of 150
60

X-H-J **P-A-M** **D-Q-K** **T-I-N-G-U-V**

Codebreaker Game

Ten Tors Math

[Percentage of an Amount](#)

Some more code-breakers you may like! (click the link)

Multiplying Exponents CODE BREAKER GAME

Multiplying Exponents Code Breaker

A	B	C	D	E	F	G	H	I	J	K	L	M
48x ⁸	27x ³	6x ² y ³	144x ⁵ y ²	56x ⁴	x ¹¹	3x ⁷	12x ⁶	4x ¹⁰	18x ³	11x ⁵	x ²	6x ² y ²
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
xy	xy ²	10x ³	200x ⁶	x ⁸	42x ¹⁵	x ⁰	32x ⁹	x	xy ²	x ² y	x ² y	x ² y

Simplify the exponents above, link them to the answers in the table above to complete the code in the four boxes at the bottom:

1. $x^5 \times x^2 = \frac{\text{ }}{x^7}$ 2. $x^4 \times x^5 = x^{\text{ }}$ 3. $x^3 \times x = x^{\text{ }}$ 4. $x^4 \times x^4 \times x^3 = x^{11}$
 5. $\frac{1}{x^2} \times x^{10} = x^{\text{ }}$ 6. $8x^3 \times 7x^5 = 56x^{\text{ }}$ 7. $7x \times 6x^{14} = 42x^{15}$ 8. $5x^3 \times 9x^3 = 45x^{\text{ }}$
 9. $3x^4y \times 2x^2y^3 \times xy = 6x^{\text{ }}y^{\text{ }}$ 10. $40x \times 5x^8 = 200x^{\text{ }}$ 11. $(3x^2y^3)^3 = 27x^{\text{ }}y^{\text{ }}$ 12. $(6x^2y^3)^2 \times xy = 36x^{\text{ }}y^{\text{ }}$

L-R-U F-T-E S-A-M Q-B-C

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[Multiplying Exponents](#)

Quadratic Formula CODE BREAKER GAME

Quadratic Formula Code Breaker

A	B	C	D	E	F	G	H	I	J	K	L	M
9x ²	199	382	1.63	9.21	2.81	214	1.07	9.83	3.54	9.39	11.2	113
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
2x ²	3.76	1.81	40.13	0.52	3.65	69.9	1.44	4.51	46.96	-1.39	-0.72	4.31

Solve, using the quadratic formula, link your answers to the table above to complete the code in the four boxes at the bottom. Answer to 2 decimal places:

1. $3x^2 + 5x - 9 = 0$ 2. $x^2 + 6x - 4 = 0$ 3. $5x^2 + 3x - 2 = 0$ 4. $2x^2 + 6x - 95 = 0$
 $x = 1.09$, $x = -6.61$, $x = -0.61$, $x = 5.53$,
 $x = -2.76$, $x = -6.61$, $x = -3.56$, $x = -8.55$
 5. $9x^2 + 5x - 2 = 0$ 6. $5x^2 = 2x + 4$ 7. $5x^2 - 4x - 2 = 0$ 8. $x(6x + 1) = 11$
 $x = 0.27$, $x = 1.12$, $x = 1.15$, $x = 1.15$,
 $x = -0.82$, $x = -0.72$, $x = -0.35$, $x = -1.44$
 9. $x^2 = 12x + 31$ 10. $11 - 9x - x^2 = 0$ 11. $(x + 1)(2x + 3) = 7$ 12. $2x(2x - 3) = 1$
 $x = 4.85$, $x = -1.85$, $x = 1.20$, $x = -0.83$,
 $x = -1.44$, $x = -0.20$, $x = -0.83$, $x = 1.65$,
 $x = -1.44$, $x = -0.15$

B-A-T S-E-L M-O-Z R-I-D

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[Quadratic Formula](#)

Scientific Notation CODE BREAKER GAME

Scientific Notation Code Breaker

A	B	C	D	E	F	G	H	I	J	K	L	M
7.45	8.9941	99.88	22	4.41	3.451	17.594	7.11	4.332	23.002	101	1.87	219
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
8.9999	3.92	17.589	1.1	59.804	4.9001	4.9001	8.0001	2.0001	2.0001	7.18	10.11	4.9001

Answer each question, link your answer to the table above to complete the code in the four boxes at the bottom:

1. Write the following number in scientific notation:
 5×10^8 2. Write the following number in scientific notation:
 7.45 3. Write the following number in scientific notation:
 2.45×10^4 4. Write the following number in scientific notation:
 5.15×10^{11} 5. Write the following number in scientific notation:
 826.07

6. Write the following number in scientific notation:
 30000000 7. Write the following number in scientific notation:
 5.07×10^{-5} 8. Write the following number in scientific notation:
 23000 9. Write the following number in scientific notation:
 6.567×10^{-3} 10. Write the following number in scientific notation:
 2284

11. Write the following number in scientific notation:
 82.4×10^{-3} 12. Write the following number in scientific notation:
 2.9009×10^6 13. Write the following number in scientific notation:
 3.1×10^4

C-A-S Y-Z-H T-J-E D-F-P X-M-Q

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










[Scientific Notation](#)

Pythagorean CODE BREAKER GAME

Pythagorean Code Breaker

A	B	C	D	E	F	G	H	I	J	K	L	M
11	8.2	11	11.7	19	8.9	4.8	1.1	2.5	5	25	5	25
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
16	5	17	20	8.9	22.4	30.1	1	5	8.4	1.5	19	12.7

Find the value of a for each question, link your answer to the table above to complete the code in the four boxes at the bottom:

1.  2.  3.  4. 
 5.  6.  7.  8. 
 9.  10.  11.  12. 

M-O-T Z-A-G R-I-D B-E-N

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[Pythagorean Theorem](#)

Simplifying Radicals CODE BREAKER GAME

Simplifying Radicals Code Breaker

A	B	C	D	E	F	G	H	I	J	K	L	M
7/19	16/7	2/9	2/18	5/7	6/2	6/6	2/3	3/13	4/13	2/5	1/3	5/2
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
2/8	5/9	10/5	11/7	4/13	4/13	3/7	7/15	7/5	24/11	12/10	12/3	4/3

Simplify the radical below, link them to the answers in the table above to complete the code in the four boxes at the bottom:

1. $\sqrt{27}$ 2. $\sqrt{50}$ 3. $\sqrt{216}$ 4. $\sqrt{700}$
 $3\sqrt{3}$, $5\sqrt{2}$, $6\sqrt{6}$, $10\sqrt{7}$
 5. $\sqrt{243}$ 6. $\sqrt{3} \times \sqrt{24}$ 7. $\sqrt{75}$ 8. $\sqrt{847}$
 $9\sqrt{3}$, $6\sqrt{2}$, $5\sqrt{3}$, $11\sqrt{7}$
 9. $\sqrt{50} \times \sqrt{10}$ 10. $\sqrt{245}$ 11. $\sqrt{21} \times \sqrt{35}$ 12. $\sqrt{40} \times \sqrt{2}$
 $10\sqrt{5}$, $7\sqrt{5}$, $7\sqrt{15}$, $4\sqrt{5}$

L-M-G B-E-F O-Q-P V-U-Z

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[Simplifying Radicals](#)

Rational Exponents CODE BREAKER GAME

Rational Exponents Code Breaker

A	B	C	D	E	F	G	H	I	J	K	L	M
x^3y^3	x^4	$\frac{1}{16}$	$\frac{x^2}{9x^2}$	$\frac{2}{5}$	$16x^4y^2$	$\frac{2}{5}$	x^2	$6x^2$	$\frac{4}{9}$	$2x^2y^3$	x^8	$\frac{1}{13}$
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
$\frac{1}{x^2}$	\sqrt{x}	\sqrt{x}	$10x^2y^3$	$\frac{9x^2}{25}$	$\frac{3}{5}$	$6x^3$	$\frac{2}{5}$	$25x^2y^4$	13	$2x^2$	$\frac{2}{3}$	$\frac{1}{17}$

Answer each question, link your answer to the table above to complete the code in the four boxes at the bottom:

1. Simplify $\sqrt{8x^4}$ 2. Simplify $x^2(x^{1/2})^2$ 3. Evaluate $\frac{1}{16}9^2$ 4. Simplify $\sqrt{8x^2 \cdot 2x^2}$ 5. Simplify $(4xy^3x^2)^{1/2}$
 $2x^2$, x^2 , $\frac{9}{4}$, $4x^2$, $2xy^3$
 6. Simplify $(16x^4y^3)^{1/2}$ 7. Evaluate $\frac{4}{7}(\frac{16}{49})^{\frac{1}{2}}$ 8. Simplify $\sqrt{x} \times x^2\sqrt{x}$ 9. Simplify $(125x^{12}y^6)^{1/3}$ 10. Evaluate $\frac{2}{9}(\frac{81}{4})^{\frac{1}{2}}$
 $4x^2y^3$, $\frac{4}{7}$, $2x^3$, $5x^3y^2$, $5x^3y^2$
 11. Evaluate $\frac{2}{5}(\frac{125}{8})^{\frac{2}{3}}$ 12. Simplify $\frac{9y^4x^3}{27y^6}$ 13. Evaluate $\frac{1}{5}(\frac{25}{64})^{\frac{3}{2}}$ 14. Simplify $\sqrt{36x^6}$ 15. Evaluate $\frac{3}{4}(\frac{64}{27})^{\frac{1}{3}}$
 5 , $\frac{5}{2}$, $\frac{1}{3}$, $2x^3y^2$, $\frac{5}{64}$, $6x^3$, 3 , $\frac{4}{3}$


B-Q-M Y-O-R N-H-W V-E-S Z-U-T

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[Rational Exponents](#)

Some more resources you may like! (click the link)


Doubling and Halving



Bingo!
Game
by Ten Tors Math

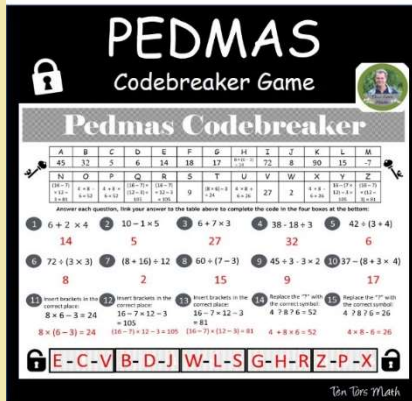
[Doubling & Halving Game](#)

Fractions - the four operations



[Fractions Puzzle](#)

PEDMAS Codebreaker Game



Pedmas Codebreaker

A	B	C	D	E	F	G	H	I	J	K	L	M
45	32	5	6	14	18	17	10	73	8	90	15	-7
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
100	10	100	100	100	100	100	100	100	100	100	100	100

Answer each question, link your answer to the table above to complete the code in the four boxes at the bottom!

1 $6 + 2 \times 4 = 14$ 2 $10 - 1 \times 5 = 5$ 3 $6 + 7 \times 3 = 27$ 4 $38 - 18 \div 3 = 32$ 5 $42 \div (3 + 4) = 6$

6 $72 \div (3 \times 3) = 8$ 7 $(8 + 16) \div 12 = 2$ 8 $60 \div (7 - 3) = 15$ 9 $45 \div 3 - 3 \times 2 = 9$ 10 $37 - (8 + 3 \times 4) = 17$

11 Shortbread in the tin: $5 \times 6 - 3 = 24$ 12 Shortbread in the tin: $36 - 7 \times 12 - 3 = 105$ 13 Shortbread in the tin: $100 - 71 + 12 - 3 = 105$ 14 Shortbread in the tin: $100 - 71 + 12 - 3 = 105$ 15 Shortbread in the tin: $100 - 71 + 12 - 3 = 105$

16 Replace the "1" with the correct symbol: $4 \times 8 \div 6 = 26$


17 Replace the "1" with the correct symbol: $4 \times 8 \div 6 = 26$

E - C - V | B - D - J | W - L - S | G - H - R - Z - P - X

Ten Tors Math

[PEDMAS codebreaker activity](#)


Fractions, Decimals and Percentages



Bingo!
Game
by Ten Tors Math

[FDP Bingo Game](#)


Fractions & Decimals



Mini Bundle
of games & puzzles
by Ten Tors Math

[FDP Bundle](#)

Percentage Increase & Decrease



Task Cards
by Ten Tors Math

Grades 7 to 10

[Percentage Increase and Decrease](#)


Some more resources you may like! (click the link)

Spheres
Volume & Surface Area



Bingo! Game
by Ten Tors Math

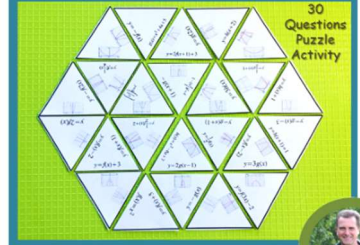
Grades 8 to 11
Unique bingo cards for up to 26 students



[Volume & Surface Area of Spheres](#)


Quadratic Graph Transformations

Graph Transformations Puzzle Activity



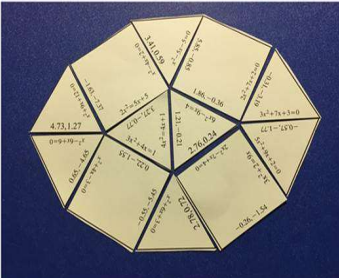
30 Questions
Puzzle Activity

Puzzle



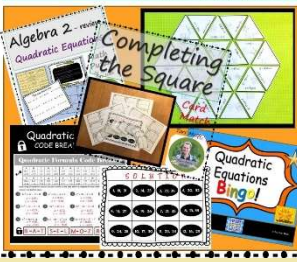
[Quadratic Graph Transformations](#)

Using the Quadratic Formula to solve equations




The Quadratic Formula

Algebra 2
Quadratic Review Activities




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[Algebra 2 Quadratic Bundle](#)

Percentage Increase & Decrease




Task Cards
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Grades 7 to 10




[Percentage Increase and Decrease](#)

Completing the Square



Card Match
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[Completing the Square](#)