

Geometry
Factoring Trinomials ($a = 1$)

Name: _____

A **TRINOMIAL** is a polynomial with _____ terms. We will use " _____ " to factor trinomials.

$$ax^2 + bx + c$$

1. $x^2 + 8x + 12$

2. $x^2 - 5x + 6$

3. $x^2 - 2x - 8$

4. $x^2 + 3x - 18$

5. $x^2 - x - 42$

6. $x^2 + x - 42$

Try these by yourself!

7. $x^2 + 8x + 15$

8. $x^2 + 6x + 5$

9. $x^2 + 5x - 36$

10. $x^2 - 9x + 8$

11. $x^2 + 13x + 36$

12. $x^2 - 23x + 60$

13. $x^2 + 3x - 18$

14. $w^2 + 22w + 40$

15. $y^2 - 2y - 80$

16. $y^2 - 12y + 36$

When Is a Wrestler “King of the Ring”?

Factor each trinomial below. Find your answer and notice the letter next to it. Write this letter in the box containing the number of that exercise. Keep working and you will get the gripping answer to the title question.

- ① $n^2 + 6n + 5$
- ② $n^2 + 7n + 10$
- ③ $n^2 - 7n + 12$
- ④ $n^2 - 11n + 28$
- ⑤ $n^2 + 2n - 15$
- ⑥ $n^2 - 5n - 24$
- ⑦ $n^2 + n - 56$

Answers:

- ⒴ $(n + 2)(n + 6)$
- Ⓗ $(n + 5)(n - 3)$
- Ⓦ $(n + 5)(n + 1)$
- Ⓔ $(n - 3)(n - 4)$
- Ⓑ $(n - 1)(n + 15)$
- Ⓢ $(n + 8)(n - 7)$
- Ⓗ $(n + 2)(n + 5)$
- Ⓔ $(n - 8)(n + 3)$
- Ⓡ $(n - 12)(n - 2)$
- Ⓝ $(n - 7)(n - 4)$

- ⑧ $t^2 + 10t + 16$
- ⑨ $t^2 - 15t + 50$
- ⑩ $t^2 + 8t - 9$
- ⑪ $t^2 - 7t - 30$
- ⑫ $t^2 - t - 30$
- ⑬ $t^2 + 14t + 48$
- ⑭ $t^2 + 8t - 48$

Answers:

- Ⓝ $(t - 6)(t + 5)$
- Ⓥ $(t - 25)(t + 2)$
- Ⓣ $(t - 5)(t - 10)$
- Ⓣ $(t + 6)(t + 8)$
- Ⓞ $(t - 10)(t + 3)$
- Ⓑ $(t + 15)(t - 2)$
- Ⓘ $(t + 8)(t + 2)$
- Ⓗ $(t - 4)(t + 12)$
- Ⓢ $(t + 9)(t - 1)$
- Ⓐ $(t - 24)(t + 2)$

- ⑮ $a^2 + 5ab + 6b^2$
- ⑯ $a^2 - 4ab - 21b^2$
- ⑰ $a^2 + 6ab - 7b^2$
- ⑱ $a^2 - 14ab - 32b^2$
- ⑲ $a^2 - 29ab + 100b^2$
- ⑳ $a^2 + 7ab - 18b^2$
- ㉑ $a^2 + 2ab + b^2$

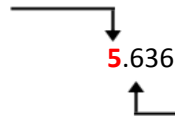
Answers:

- Ⓚ $(a - 8b)(a + 4b)$
- Ⓗ $(a + 7b)(a - b)$
- Ⓐ $(a - 20b)(a + 5b)$
- Ⓔ $(a + 2b)(a + 3b)$
- Ⓦ $(a + 9b)(a - 2b)$
- Ⓣ $(a - 7b)(a + 3b)$
- Ⓞ $(a - 25b)(a - 4b)$
- Ⓢ $(a + 6b)(a + 3b)$
- Ⓝ $(a + b)(a + b)$
- Ⓡ $(a - 16b)(a + 2b)$

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
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Rounding Decimals

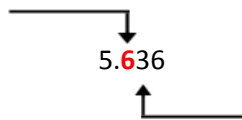
Round to the nearest whole number.



Since the digit to the right is 5 or greater, round up to 6.

5.636 rounded to the nearest whole number is **6**.

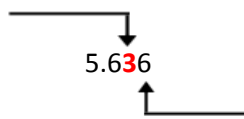
Round to the nearest tenth.



Since the next digit to the right is less than 5, round down to 5.6.

5.636 rounded to the nearest tenth is **5.6**.

Round to the nearest hundredth.



Since the next digit to the right is 5 or greater, round up to 5.64.

5.636 rounded to the nearest hundredth is **5.64**.

What is 8.525 rounded to the nearest whole number? _____

What is 8.525 rounded to the nearest tenth? _____

What is 8.525 rounded to the nearest hundredth? _____

What is 3.341 rounded to the nearest whole number? _____

What is 3.341 rounded to the nearest tenth? _____

What is 3.341 rounded to the nearest hundredth? _____

Circle the correct answer.

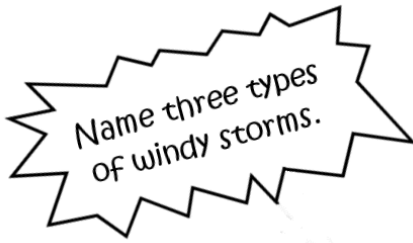
5.385 rounded to the nearest tenth is 5.3 5.4 5.5

4.62 rounded to the nearest whole number is 4.7 4 5

6.652 rounded to the nearest tenth is 6.5 6.6 6.7

4.106 rounded to the nearest hundredth is 4.10 4.11 4.12

Windy Weather Mystery Math



1. _____
2. _____
3. _____

2.55	1.56	3.15	4.74	9.56	9.61	7.30	6.85	3.49
G	R	L	K	B	P	M	X	Y

7.78	2.31	4.11	8.77	2.84	2.63	7.58	5.55	1.75
E	V	U	O	I	D	S	A	Z

3.74	9.89	1.42	4.24	6.32	3.31	8.63	8.06
W	C	T	F	H	N	J	Q

Round each decimal to the nearest hundredth. Write the answer in the middle square then find the letter that corresponds to your answer in the key above. Write the corresponding letter in the bottom square to uncover three types of windy weather. The first one is done for you.

6.318	4.107	1.562	1.559	2.843	9.891	5.548	3.305	7.776
6.32								
h								

9.559	3.154	2.837	1.752	1.746	5.553	1.564	2.625

1.422	8.770	1.557	3.314	5.546	2.631	8.765

Our Government Mystery Math

Name the three branches of the U.S. government.

1. _____
2. _____
3. _____

4.1	1.7	3.6	3.9	5.2	4.7	9.9	7.9	8.8
G	R	L	K	B	P	M	X	Y

2.6	6.8	15.1	1.8	5.7	2.8	1.5	7.7	10.5
E	V	U	O	I	D	S	A	Z

12.7	5.5	4.5	2.3	1.6	9.5	11.5	6.6
W	C	T	F	H	N	J	Q

Round each decimal to the nearest tenth. Write the answer in the middle square then find the letter that corresponds to your answer in the key above. Write the corresponding letter in the bottom square to uncover the three branches of government. The first one is done for you.

3.63	2.59	4.10	5.73	1.52	3.59	7.65	4.45	5.67	6.79	2.62
3.6										
I										

11.49	15.09	2.79	5.69	5.45	5.72	7.73	3.56

2.60	7.90	2.57	5.54	15.14	4.51	5.70	6.84	2.64