



## Identify terms in an expression

**1**

Valid rational roots are in the form  $p/q$  where  $p$  must be a factor of the constant. What is the constant in this polynomial?

$$f(x) = 5x^3 + 15x^2 - 30x - 40$$

A -40

B 5

C 15

D -30

**2**

Valid rational roots are in the form  $p/q$  where  $p$  must be a factor of the constant. What is the constant in this polynomial?

$$f(x) = 4x^2 - 10x - 12 + 2x^3$$

A 2

B -12

C 4

D -10

**3**

What is the value of this equation when  $p=4$ ,  $z=3$

$$6p + 3z$$

A  $p^6 + 33$ 

B 33

C  $6p - 33$ 

D 105

E -96

F  $30p$ **4**

What is the value of this equation when  $b=4$ ,  $c=2$

$$3b + 3c$$

A 36

B 18

C 20

D -48

E  $21b$ 

F 144

**5**

What are the values of  $a$ ,  $b$ , and  $c$  in the quadratic formula, given this equation and the standard form?

$$y = -x^2 + x - 3$$

standard form:

$$y = ax^2 + bx + c$$

A  $a = -1$   
 $b = 1$   
 $c = -3$

B  $a = -3$   
 $b = 1$   
 $c = -1$



## Identify terms in an expression

**6**

What are the values of a, b, and c in the quadratic formula, given this equation and the standard form?

$$y = -x^2 + x - 2$$

standard form:

$$y = ax^2 + bx + c$$

|   |                                 |
|---|---------------------------------|
| A | $a = -1$<br>$b = 1$<br>$c = -2$ |
|---|---------------------------------|

|   |                                 |
|---|---------------------------------|
| B | $a = 1$<br>$b = -1$<br>$c = -2$ |
|---|---------------------------------|

**7**

What is the value of this equation when  $c=5$ ,  $d=4$

$$6c - 3d$$

|   |            |   |       |
|---|------------|---|-------|
| A | 162        | B | -150  |
| C | 13         | D | $18c$ |
| E | $c^6 + 18$ | F | 18    |

**8**

What is the value of this equation when  $x=5$ ,  $b=4$

$$5x + 4b$$

|   |       |   |     |
|---|-------|---|-----|
| A | 61    | B | 141 |
| C | $41x$ | D | 41  |
| E | 625   | F | 40  |

**9**

What is the value of this equation when  $b=5$ ,  $x=4$

$$2b - 2x$$

|   |          |   |           |
|---|----------|---|-----------|
| A | 82       | B | $2b$      |
| C | 2        | D | -50       |
| E | $2b - 2$ | F | $b^2 + 2$ |

**Identify terms in an expression****10**

What are the values of a, b, and c in the quadratic formula, given this equation and the standard form?

$$y = -2x^2 + 4x - 5$$

---

standard form:

$$y = ax^2 + bx + c$$

A

$$a = -5$$

$$b = 4$$

$$c = -2$$

B

$$a = -2$$

$$b = 4$$

$$c = -5$$

**11**

What are the values of a, b, and c in the quadratic formula, given this equation and the standard form?

$$y = 5x^2 + x + 4$$

---

standard form:

$$y = ax^2 + bx + c$$

A

$$a = 4$$

$$b = 1$$

$$c = 5$$

B

$$a = 5$$

$$b = 1$$

$$c = 4$$