



Identify constants

- 1 What does this algebra term mean?

$$4r$$

A $4 \times r$	B 4^r
C $4 - r$	D $4 + r$

- 2 Seven times k

A $7k$	B $\frac{k}{7}$
C $7 - k$	D $k + 7$

- 3 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?

$$f(x) = 2x^4 - 32 - 30x^2 - 4x^3 + 64x$$

A 2	B -30
C -32	D -4

- 4 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?

$$f(x) = 5x^4 - 15x^3 - 10x^2 + 60x - 40$$

A -10	B -15
C -40	D 5

- 5 What are the possible rational roots of this polynomial?

$$f(x) = 5x^3 - 15x^2 + 20$$

A $\frac{\text{factors of 5}}{\text{factors of 20}}$	B $\frac{\text{factors of 20}}{\text{factors of 15}}$
C $\frac{\text{factors of 15}}{\text{factors of 5}}$	D $\frac{\text{factors of 20}}{\text{factors of 5}}$

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

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

A $a = -2$ $b = 1$ $c = -1$	B $a = 1$ $b = -1$ $c = -2$
C $a = -1$ $b = 1$ $c = -2$	

- 7 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?

$$f(x) = 9x + 15x^2 - 27 + 3x^3$$

A 3	B -27
C 9	D 15



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

$$y = 4x^2 + 3 - 2x$$

standard form:

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

A

$$a = -2$$

$$b = 4$$

$$c = 3$$

B

$$a = 4$$

$$b = -2$$

$$c = 3$$

9

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?

$$f(x) = 3x^3 - 21x^2 + 42x - 24$$

A

42

B

-24

C

3

D

-21

10

What are the possible rational roots of this polynomial?

$$f(x) = 2x^5 + 14x^4 + 30x^3 + 10x^2 - 32x - 24$$

A

factors of 14
factors of 2

B

factors of 24
factors of 2

C

factors of 2
factors of 24

D

factors of 24
factors of 14