

A.CED.A.4: Transforming Formulas 2b

- 1 If $rx - st = r$, which expression represents x ?
- 2 If $3ax + b = c$, then x equals
- 3 If $abx - 5 = 0$, what is x in terms of a and b ?
- 4 If the formula for the perimeter of a rectangle is $P = 2l + 2w$, then w can be expressed as
- 5 If $2y + 2w = x$, then w , in terms of x and y , is equal to
- 6 The members of the senior class are planning a dance. They use the equation $r = pn$ to determine the total receipts. What is n expressed in terms of r and p ?
- 7 Given $W = \frac{V^2 t}{R}$, which expression can be used to represent t in terms of W , R , and V ?
- 8 The formula for the volume of a pyramid is $V = \frac{1}{3} Bh$. What is h expressed in terms of B and V ?
- 9 A formula used for calculating velocity is $v = \frac{1}{2} at^2$. What is a expressed in terms of v and t ?
- 10 If $s = \frac{2x+t}{r}$, then x equals
- 11 If $\frac{ey}{n} + k = t$, what is y in terms of e , n , k , and t ?
- 12 If $a + ar = b + r$, the value of a in terms of b and r can be expressed as
- 13 If $k = am + 3mx$, the value of m in terms of a , k , and x can be expressed as
- 14 If $ax + 3 = 7 - bx$, what is x expressed in terms of a and b ?
- 15 If $z + y = x + xy^2$, what is x expressed in terms of y and z ?
- 16 Solve for c in terms of a and b : $bc + ac = ab$

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Answer Section

1 ANS:

$$\frac{r+st}{r}$$

$$rx - st = r$$

$$rx = r + st$$

$$x = \frac{r+st}{r}$$

REF: 061316ia

2 ANS:

$$\frac{c-b}{3a}$$

$$3ax + b = c$$

$$3ax = c - b$$

$$x = \frac{c-b}{3a}$$

REF: 080808ia

3 ANS:

$$x = \frac{5}{ab}$$

$$abx - 5 = 0$$

$$abx = 5$$

$$x = \frac{5}{ab}$$

REF: 011425ia

4 ANS:

$$w = \frac{P-2l}{2}$$

$$P = 2l + 2w$$

$$P - 2l = 2w$$

$$\frac{P-2l}{2} = w$$

REF: 010911ia

5 ANS:

$$\frac{x-2y}{2}$$

$$2y + 2w = x$$

$$2w = x - 2y$$

$$w = \frac{x-2y}{2}$$

REF: 081330ia

6 ANS:

$$n = \frac{r}{p}$$

REF: 011016ia

7 ANS:

$$\frac{WR}{V^2}$$

REF: 061623ia

8 ANS:

$$h = \frac{3V}{B}$$

REF: 081230ia

9 ANS:

$$a = \frac{2v}{t^2}$$

REF: 061023ia

10 ANS:

$$\frac{rs-t}{2}$$

$$s = \frac{2x+t}{r}$$

$$rs = 2x+t$$

$$rs - t = 2x$$

$$\frac{rs-t}{2} = x$$

REF: 011228ia

11 ANS:

$$y = \frac{n(t-k)}{e}$$

$$\frac{ey}{n} + k = t$$

$$\frac{ey}{n} = t - k$$

$$y = \frac{n(t-k)}{e}$$

REF: 011125ia

12 ANS:

$$\frac{b+r}{1+r}$$

$$a + ar = b + r$$

$$a(1+r) = b + r$$

$$a = \frac{b+r}{1+r}$$

REF: 060913ia

13 ANS:

$$\frac{k}{a+3x}$$

$$k = am + 3mx$$

$$k = m(a + 3x)$$

$$\frac{k}{a+3x} = m$$

REF: 061215ia

14 ANS:

$$\frac{4}{a+b}$$

$$ax + 3 = 7 - bx$$

$$ax + bx = 4$$

$$x(a+b) = 4$$

$$x = \frac{4}{a+b}$$

REF: 081426ia

15 ANS:

$$\frac{z+y}{1+y^2}$$

$$z+y = x(1+y^2)$$

$$\frac{z+y}{1+y^2} = x$$

REF: 061524ia

16 ANS:

$$bc + ac = ab$$

$$c(b+a) = ab$$

$$c = \frac{ab}{b+a}$$

REF: 081131ia