

**Algebra I - Chapter 2 Test****Multiple Choice**

Identify the choice that best completes the statement or answers the question.

**What is the solution of the equation?**

- 1  $-3(6x - 10) = 3(-2x - 2)$   
Ⓐ 2  
Ⓑ 4  
Ⓒ -3  
Ⓓ 3
- 2  $4(p - 2) - 3(1 - 3p) = 3p + 19$   
Ⓐ 1  
Ⓑ 10  
Ⓒ  $-\frac{15}{4}$   
Ⓓ 0

**What is the solution of the equation?**

- 3  $\frac{2p}{3} + 16 = 4$   
Ⓐ 30  
Ⓑ -15  
Ⓒ -31  
Ⓓ -18
- 4  $3(y + 7) = 36$   
Ⓐ 5  
Ⓑ 19  
Ⓒ 6  
Ⓓ -19
- 5  $\frac{2p}{3} - \frac{23}{3} = -7$   
Ⓐ 7  
Ⓑ -12  
Ⓒ 1  
Ⓓ -45

**What is the solution of the equation?**

- 6  $-3x - 9 = -2 + 4x$   
Ⓐ -4  
Ⓑ 7  
Ⓒ -1  
Ⓓ 2
- 7  $3x + 4 = 5x - 8$   
Ⓐ 7  
Ⓑ 6  
Ⓒ 3  
Ⓓ -2
- 8 Which equation is an identity?  
Ⓐ  $6m - 5 = 7m + 6 - m$   
Ⓑ  $9 - (2v + 6) = -2v - 3$   
Ⓒ  $7y + 4 = 7y - 7$   
Ⓓ  $7w + 4 - w = 8w - 2(w - 2)$
- 9 What is the height of a triangle that has an area of  $104 \text{ yd}^2$  and a base with a length of 26 yd?  
(Area of a triangle is equal to one-half times the base times the height)  
Ⓐ 8 yd  
Ⓑ 4 yd  
Ⓒ 2 yd  
Ⓓ 0.13 yd
- 10 John and 2 friends are going out for pizza for lunch. They split one pizza and 3 large drinks. The pizza cost \$14.00. They spend a total of \$18.80. Find the cost of one large drink.  
Ⓐ \$1.65  
Ⓑ \$1.60  
Ⓒ \$16.40  
Ⓓ \$2.40

- 11 What equation do you get when you solve  $m - d = m + sx$  for  $x$ ?

(A)  $x = \frac{2m - d}{s}$   
(B)  $x = -\frac{2m + d}{s}$   
(C)  $x = -\frac{d}{s}$   
(D)  $x = -\frac{s}{d}$

**What is the solution of the equation?**

- 12  $8d + 2d - 5d + 5 - 4d = 0$

(A)  $-5$   
(B)  $-\frac{5}{9}$   
(C)  $4$   
(D)  $\frac{5}{11}$

- 13 Which equation has no solution?

(A)  $6m - 4 = 8m + 6 - m$   
(B)  $3w + 8 - w = 5w - 2(w - 4)$   
(C)  $-3y + 5 = -3y - 3$   
(D)  $14 - (2v + 4) = 2v - 10$

**What is the solution of each equation?**

- 14  $2(h + 3) + 3h = 5h + 12$

(A)  $-6$   
(B)  $6$   
(C) infinitely many solutions  
(D) no solution

- 15 A camera manufacturer spends \$2750 each day for overhead expenses plus \$7 per camera for labor and materials. The cameras sell for \$12 each. How many cameras must the company sell in one day to equal its daily costs? If the manufacturer can increase production by 50 cameras per day, what would their daily profit be?

(A) The company must sell 550 cameras to equal its daily costs; \$600  
(B) The company must sell 230 cameras to equal its daily costs; \$1350  
(C) The company must sell 550 cameras to equal its daily costs; \$250  
(D) The company must sell 500 cameras to equal its daily costs; \$0