. Solve for x:
$$A - Bx = C + D(x + F)$$

(a) $\frac{A - C}{B + D}$
(b) $\frac{1}{B}(C + DF) - A$
(c) $\frac{A - C - DF}{B + D}$
(d) $\frac{A}{B} + C + D(1 + F)$
(e) 7.13

1

2. Solve for x: $\frac{x}{a} + x = 8b$ (a) 4ab(b) 8ab(c) $\frac{8b}{a-1}$ 8b

(d)
$$\frac{8b}{a+1}$$

(e) $\frac{8ab}{1+a}$

3. If 10x + 10y = 0 and 4x - 4y = -8, then

(a) x = -1, y = 1(b) x = -10, y = 10(c) x = 1, y = -1(d) x = 0, y = -2

(e)
$$x = -2, y = 0$$

4. Solve for t:
$$\theta = \omega_{\circ}t - \frac{1}{2}\alpha t^{2}$$

(a) $\frac{\omega_{\circ} \pm \sqrt{\omega_{\circ}^{2} - 4\alpha\theta}}{2\alpha}$
(b) $\frac{\omega_{\circ} \pm \sqrt{\omega_{\circ}^{2} - 2\alpha\theta}}{\alpha}$
(c) $\frac{\omega_{\circ} \pm \sqrt{\omega_{\circ} - 2\alpha\theta}}{\alpha}$
(d) $\frac{\omega_{\circ}^{2} \pm \sqrt{\omega_{\circ} - 2\alpha\theta}}{\alpha}$
(e) $\frac{\omega_{\circ} \pm \sqrt{\omega_{\circ}^{2} \pm 4\alpha\theta}}{\alpha}$

5. In the diagram, which of the following are true? There may be more than one correct answer, but choose only one.



6. In the right-angled triangle shown, which is true?



7.
$$\frac{1}{5} + \frac{5}{1} = ?$$

(a) 26
(b) 1/25
(c) 26/5
(d) 5/26
(e) 1

8. $\frac{1}{5} + \frac{3}{4} = ?$ (a) 3/9(b) 19/20(c) 3/20(d) 4/9

- (e) 4/20
- 9. If A is equal to B, and B is equal to C, then we can say that:
 - (a) there is not enough information to determine a relationship between A and C
 - (b) A is greater than C
 - (c) A is smaller than C
 - (d) A is necessarily equal to C
 - (e) A is not necessarily equal to C
- 10. Evaluate the following indefinite integral: $\int x \, dx$
 - (a) 0 (b) $\frac{1}{2}x^2 + C$ (c) $\frac{1}{2}x^2$ (d) $\frac{1}{2}x + C$ (e) $x^2 + C$