

Sample Test Questions

for

Mt. SAC Math Placement Test

1. Simplify: $7(6^2 - 10) - 4^2$

- (a) - 2
- (b) 166
- (c) 30
- (d) 198
- (e) 226

2. Find the L.C.M. (least common multiple) of 18 and 30.

- (a) 90
- (b) 540
- (c) 6
- (d) 60
- (e) 180

3. Change $11\frac{3}{5}$ to an improper fraction.

- (a) $\frac{33}{5}$
- (b) $11\frac{5}{3}$
- (c) $\frac{14}{5}$
- (d) $\frac{58}{5}$
- (e) *none of these*

4. Find 65% of 120.

- (a) 185
- (b) 7800
- (c) 78
- (d) 90
- (e) *none of these*

5. Round 15,764 to the nearest hundred.

- (a) 16,000
- (b) 15,700
- (c) 15,800
- (d) 15,000
- (e) 15,760

6. Solve for x : $-3x + 10 = -41$

- (a) $\frac{31}{3}$
- (b) -17
- (c) -48
- (d) 17
- (e) $-\frac{31}{3}$

7. During a bowling tournament, David bowled games of 210, 195, 213, 201, 226, and 155. What was his average score for the six games?

- (a) 200
- (b) 1200
- (c) 226
- (d) 201
- (e) *none of these*

8. Simplify: $-9 - (-14) + 5(4^2 - 3)$

- (a) 42
- (b) 70
- (c) 23
- (d) 30
- (e) 10

9. Simplify: $(5x - 7)(3x + 4)$

- (a) $15x^2 + x - 28$
- (b) $15x^2 + x + 28$
- (c) $14x - 28$
- (d) $15x^2 + 41x - 28$
- (e) $15x^2 - x - 28$

10. Evaluate if $x = -3$ and $y = \frac{2}{3}$: $-5x^2 + 3y - x$

- (a) 50
- (b) -48
- (c) 230
- (d) -40
- (e) 44

11. Find the GCF (greatest common factor) of 48 and 160.

- (a) 8
- (b) 4
- (c) 16
- (d) 48
- (e) 1

12. Find the prime factorization of 120.

- (a) $2 \times 6 \times 10$
- (b) $2 \times 2 \times 3 \times 10$
- (c) 1×120
- (d) $2 \times 2 \times 5 \times 6$
- (e) $2 \times 2 \times 2 \times 3 \times 5$

13. Simplify and reduce answer to lowest terms:

$$\frac{2}{5} - \frac{1}{15} + \frac{1}{3}$$

(a) $\frac{10}{15}$

(b) $-\frac{2}{7}$

(c) $\frac{4}{5}$

(d) $\frac{2}{3}$

(e) *none of these*

14. Simplify:

$$y^{11} \bullet y^3 \bullet y$$

(a) y^{15}

(b) y^{33}

(c) y^{14}

(d) $3y^{14}$

(e) $3y^{15}$

15. Solve for x :

$$\frac{x}{6} - \frac{1}{2} = \frac{1}{3}$$

(a) 1

(b) 2

(c) 7

(d) 11

(e) 5

Answers: 1.(b) 2.(a) 3.(d) 4.(c) 5.(c) 6.(d) 7.(a) 8.(b) 9.(e) 10.(d) 11.(c) 12.(e) 13.(d) 14.(a) 15.(e)