

Sample Test Questions
for
Intermediate Algebra Placement Test

1. Simplify: $\frac{2}{3} - \frac{3}{4} + \frac{5}{6}$

(a) $\frac{4}{13}$

(b) $-\frac{6}{13}$

(c) $\frac{3}{4}$

(d) $-\frac{11}{12}$

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

2. Simplify: $\sqrt{72} - \sqrt{18}$

(a) $3\sqrt{6}$

(b) $3\sqrt{2}$

(c) 3

(d) $3\sqrt{10}$

(e) $9\sqrt{2}$

3. Evaluate $\frac{4x-y^2}{xy-7}$ if $x=5$ and $y=3$.

(a) $-\frac{29}{22}$

(b) $-\frac{29}{8}$

(c) $\frac{11}{8}$

(d) $-\frac{7}{11}$

(e) $-\frac{1}{2}$

4. In rectangle $ABCD$ below, $AB = 12$ and $AD = 7$, with square $BCEF$. What is the area of triangle AFE ?

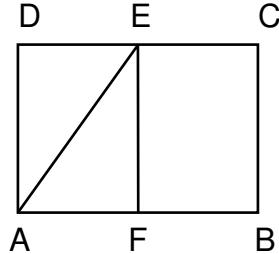
(a) 42

(b) 24.5

(c) 84

(d) 17.5

(e) 38



5. Simplify: $\frac{3}{2x} + \frac{x}{2x-6}$

(a) $\frac{3x}{4x-6}$

(b) $\frac{x+3}{4x-6}$

(c) $\frac{3x}{2x-4}$

(d) $x^2 + 3x - 9$

(e) $\frac{x^2 + 3x - 9}{2x^2 - 6x}$

6. The point $(?, -3)$ is on the graph of $5x - y = 3x - 5$.

(a) $(-1, -3)$

(b) $(5, -3)$

(c) $(29, -3)$

(d) $(-4, -3)$

(e) $(-\frac{8}{5}, -3)$

7. If $3x + y = 9$ and $x = y + 11$, then $y = ?$

(a) 5

(b) 6

(c) -6

(d) -1

(e) -12

8. Simplify: $\frac{x^4 y^9}{xy^{-3}}$

(a) $x^4 y^6$

(b) $x^3 y^6$

(c) $x^3 y^{12}$

(d) $x^4 y^{12}$

(e) $x^4 y^{-3}$

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

(a) $5x^2 - 14x - 18$

(b) $5x^2 - 8x - 2$

(c) $5x^2 - x - 18$

(d) $5x^2 + 3x - 2$

(e) $5x^4 - 8x^2 - 2$

10. One of the solutions of the equations $3x^2 - 2x - 8 = 0$ is:

(a) $-\frac{4}{3}$

(b) -2

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

(d) $\frac{4}{3}$

(e) -4

11. Simplify: 2^{-5} .

(a) -10

(b) -32

(c) 32

(d) $-\frac{1}{32}$

(e) $\frac{1}{32}$

12. One of the factors of $x^2 - 19x + 48$ is:

- (a) $x + 3$
- (b) $x - 3$
- (c) $x + 4$
- (d) $x - 4$
- (e) $x + 16$

13. The slope of the line through the points $(-9, 5)$ and $(-10, 12)$ is

- (a) 7
- (b) $\frac{1}{7}$
- (c) -7
- (d) $-\frac{1}{7}$
- (e) *undefined*

14. If the sum of three consecutive odd integers is 99, what is the largest of these integers?

- (a) 99
- (b) 31
- (c) 49
- (d) 297
- (e) 35

15. What is the area of a circle with circumference 18π ?

- (a) 9π
- (b) 324π
- (c) 18π
- (d) 81π
- (e) 36π

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