

Sample Questions for Math Placement Test

LEVEL 1

1. $\frac{3}{2} - \frac{4}{5} =$

- A. $-\frac{1}{10}$
- B. $\frac{1}{3}$
- C. $\frac{7}{10}$
- D. $-\frac{1}{7}$

E. 1

2. $12a - 7b - (4a - 21b) =$

- A. $8a + 11b$
- B. $8a - 28b$
- C. $16a + 28b$
- D. $8a + 14b$
- E. $16a + 11b$

3. Solve for x when $5(1 - x) - 2 = 3x - 4$

- A. $7/8$
- B. $7/4$
- C. $-1/8$
- D. $7/2$
- E. $-1/2$

4. The fuel for a certain two cycle engine is a mixture of 8 parts gasoline and 2 parts oil. How many gallons of gasoline are needed to make 20 gallons of fuel?

- A. 12
- B. 14
- C. 15
- D. 16
- E. 18

5. Evaluate $x^2y - 2xy - y^2$ when $x = -3$ and $y = 4$

- A. 44
- B. -4
- C. -64
- D. -8
- E. 52

6. $(2x - 3)(3x + 4) =$

- A. $5x^2 - x - 12$
- B. $6x^2 - x - 12$
- C. $6x^2 - 17x - 12$
- D. $6x^2 - 12$
- E. $6x^2 - 9x - 12$

7. Solve for x when $4x - 3 < 5 - x$.

- A. $x > 8/5$
- B. $x > 8/3$
- C. $x < 2/3$
- D. $x < 8/5$
- E. $x < 8/3$

8. The base for a rectangular box measures 2 feet by 3 feet. What is the height in feet of the box if its volume is 54 cubic feet?

- A. 6
- B. 9
- C. 27
- D. 108
- E. 324

9. If $x = -3$, then $\frac{2|x|-x}{x+1} =$

- A. $\frac{3}{4}$
- B. $-\frac{3}{2}$
- C. $\frac{9}{2}$
- D. $\frac{3}{2}$
- E. $-\frac{9}{2}$

10. $(3x^3y^2)^4 =$

- A. $81x^{12}y^8$
- B. $81x^7y^6$
- C. $12x^{12}y^8$
- D. $12x^7y^6$
- E. $9x^{12}y^8$