

Math HeadStart Program

Quiz



1. $7 + 2(8 - 3) \div 5 - 3$

- (a) 0.4 (b) 8.5 (c) 10 (d) 6 (e) None of these

2. The average of the following group of numbers 40, 25, 50, 32, 11, 60, 90 is:

- (a) 36 (b) 33 (c) 38 (d) 43 (e) None of these

3. $2\frac{1}{2} + 3\frac{3}{4} + 2\frac{5}{6} =$

- (a) $7\frac{9}{12}$ (b) $9\frac{1}{12}$ (c) $\frac{16}{33}$ (d) $7\frac{15}{48}$ (e) None of these

4. Simplify $\frac{3-\frac{1}{2}}{2-\frac{1}{4}}$, giving your answer in lowest terms.

- (a) $\frac{7}{4}$ (b) $\frac{7}{10}$ (c) $\frac{9}{2}$ (d) $1\frac{3}{7}$ (e) None of these

5. Express the following product in lowest terms:

$2\frac{1}{5} \times \frac{1}{4} \times 7$

- (a) $3\frac{1}{2}$ (b) $\frac{14}{20}$ (c) $\frac{11}{4}$ (d) $\frac{7}{10}$ (e) None of these

6. The decimal equivalent of $\frac{8}{50}$ is:

- (a) 2.22 (b) 0.16 (c) 1.6 (d) 0.016 (e) None of these

7. If Amanda is driving at a rate of 60 km/hr and it takes her $1\frac{1}{4}$ hours to travel from Toronto to Mississauga. How far is it from Toronto to Mississauga?

- (a) 7.5 km (b) 75,000 m (c) 48 km (d) 75 cm (e) None of these

8. Express $\frac{1}{4}$ as a percent:

- (a) 0.25% (b) 25% (c) 2.5% (d) 1% (e) None of these

9. What is the circumference of a circle with a diameter of 5:

- (a) 10π (b) 25π (c) 100π (d) 5π (e) None of these

10. Find the missing term: $\frac{2}{7} = \frac{10}{x}$

- (a) 35 (b) 8 (c) 20 (d) 42 (e) None of these

11. 5.12×10^3 is equivalent to:

- (a) 512 (b) 5,120 (c) 0.00512 (d) 51,200 (e) None of these

12. Simplify: $\sqrt{10^2 - 4^2}$

- (a) 9.2 (b) $\sqrt{116}$ (c) 84 (d) 2.4 (e) None of these

13. Find the value of $y^2 - 5y$, when $y = 2$

- (a) -6 (b) -8 (c) 14 (d) -1 (e) None of these

14. $18r - 12s - 2r + 6s =$

- (a) $12rs$ (b) $18r - 12s$ (c) $7rs$ (d) $16r - 6s$ (e) None of these

15. $\frac{10^5}{10^{-4}} =$

- (a) 10 (b) 10^{-9} (c) 10^{-1} (d) 10^9 (e) None of these

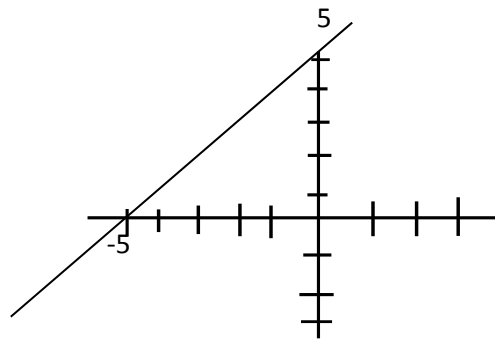
16. $(2x^2y)^5 =$

- (a) xy (b) $32x^{10}y^5$ (c) $2x^{10}y^5$ (d) $10x^{10}y^2$ (e) None of these

17. $6x - 4 = 2x - 10$, $x =$

- (a) -1.75 (b) 1.75 (c) 1.5 (d) -1.5 (e) None of these

18. The following drawing represents:



- (a) $x - y + 5 = 0$ (b) $x + y + 5 = 0$ (c) $x + y - 5 = 0$ (d) $x = y$ (e) None of these

19. Which is equal to $x^2 - 5x - 6$

(a) $(x + 6)(x - 1)$ (b) $(x + 6)(x + 1)$ (c) $(x - 6)(x - 1)$ (d) $(x - 6)(x + 1)$ (e) None of these

20. $x = |-3 - 2|$

(a) -5 (b) 5 (c) 1 (d) -1 (e) None of these

ANSWERS

1. d

2. e

3. b

4. d

5. e

6. b

7. b

8. b

9. d

10. a

11. b

12. a

13. a

14. d

15. d

16. b

17. d

18. a

19. d

20. b