M2 COMPAS–Type Multiple Choice Questions

1. Solve the system of equations:

(a) x = 3, y = –2 (b) x = 2, y = -3 (c) x = –1, y = 3 (d) x = 2, y = 2 (e) x = 2, y = –1

2. What is the equation of the line that contains (–2, 6) and (4, –3)?

(a) (b) ( c) (d) (e)

3. What is the equation of the line graphed below:

(a)

(b)

(c)

(d)

(e)

4. Which of the following equations has a graph that is perpendicular to the graph of ?

(a) (b) (c) (d) (e)

5. The graph of 3*x* + 5*y* = 15 has an *x*-intercept of:

(a) (0, 5) (b) (3,0) (c) (3, 5) (d) (0, 3) (e) (5, 0)

6. What is the equation of the line in the graph:

(a) 3*x* + 4*y*= 12

(b) 4*x* + 3*y*= –12

(c) 3*x* – 4*y*= 12

(d) 4*x* + 3*y*= 12

(e) 3*x* – 4*y*= –12

7. What is the slope of the line 2*x* + 5*y*= 10?

1. (b) (c) (d) (e) 2

8. Which of the following equations has a graph parallel to the graph of *y* = ?

1. *y* = (b)  (c) *y* = 2 (d) (e)

9. If *x* = ­, what is the value of

1. ­ (b) ­ (c) ­13 (d) 25 (e) 11

10. If *x* = ­ and If *y* = ­, what is the value of

1. (b) (c) ­ (d) (e)

11. Solve the system of equations:

(a) (1, (b) (0, 5) (c) ( (d) (2, (e) (

12. If x = and y = , what is the value of ?

(a) 7 (b) (c) 21 (d) –21 (e)

13. Solve for *x*: 3(*x* + 1) 2(3*x* 1) = 5(x + 7

(a) (b) (c) 1 (d) 2 (e) 3

14. The average of *a*, *b* and *c* is:

(a) 3 (b) (c) 75 (d) (e) 3*a* +3*c* + 3*c*

15. If *x* = – 3, what is the value of *x*2 – 2*x* + 4 ?

(a) –11 (b) 1 (c) 7 (d) 19 (e) –19

16. Simplify: (3x3 – 5x2 +2*x* – 3) – (5x3 + 2*x*2 + *x* – 2)

(a) 2x3 – 3x2 + *x* + 1 (b) –2x3 – 7x2 + *x* – 1 (c) –2x3 – 7x2 + *x* + 1 (d) 2x3 + 7x2 + *x* + 1 (e) –2x3 – 7x2 – *x* + 1

17. What is the product of (x – 3) and (3x + 2)

(a) 3x2 – 7*x* – 6 (b) 3x2 + 7*x* – 6 (c) 3x2 – 7*x* – 1 (d) 3x2 – 7*x* – 5 (e) 3x2 – *x* – 6

18. Solve for *x*: 

(a) 12 (b) 4 (c) 6 (d) 1 (e) –6

19. Simplify:

(a) 5 (b) 3 (c) 25 (d) 3 (e) 5

20. Simplify:

(a) 2 (b) 8 (c) 32 (d) 8 (e) 4

21. Simplify:

(a) –27 (b) –18 (c) – (d) (e)

22. Which of the following equations has a graph perpendicular to the graph of ?

(a) *y* = 2*x* – 5 (b) y = *x* + 3 (c) y = *x* + 3 (d) y = *x* + 3 (e) y = *x* + 3

23. Simplify:

(a) (b) (c)

(d) (e)

24. Which of the following equations has a graph parallel to the graph of 2?

(a) y = –3*x* + 1 (b) y = *x* + 1 (c) y = *x* + 1 (d) y = *x* + 1 (e) y = –2*x* + 1

25. Which of the following is a factor of 2x2 + 3*x* – 5 ?

(a) x + 5 (b) 2x + 5 (c) x + 1 (d) 2x + 1 (e) 2x – 1

26. Which of the following expressions is the product of (x – 2)( 3x2 + 4*x* – 1) ?

(a) 3x3 – 6x2 +9*x* + 2 (b) 3x3 – 6x2 +9*x* + 1 (c) 3x3 + 2x2 +9*x* – 2 (d) 3x3 + 6x2 –9*x* + 1 (e) 3x3 – 2x2 – 9*x* + 2

27. Solve for *x*: 2x – 3

(a) (b) (c) (d) (e)

28. Which of the following are the solutions of ?

(a) x = 2, x = 3 (b) x = 2, x = –3 (c) x = 6, x = 1 (d) x = 6, x = –1 (e) x = 3, x = 0

29. Which of the following equations is an equation for the line that passes through (–2, 3) and (1, –3) ?

(a) y = 2x – 1 (b) y = 2x + 1 (c) y = –2x + 1 (d) y = –2x – 1 (e) y = –3x + 1

30. Which of the following equation has a graph that is perpendicular to 3x + 4y = 4 ?

(a) (b) (c) (c) (d)