

Math 3 Advanced

Unit 1 Quiz (Practice test)

1. What is the slope of the line below?
 $y = 6x - 11$
a) 11 b) -11 c) -6 d) 6
2. What is the y -intercept of the line below?
 $y = \frac{2}{3}x + 9$
a) 9 b) -9 c) $\frac{2}{3}$ d) $-\frac{2}{3}$
3. What is the slope of the line that contains $(3, -7)$ and $(8, 5)$?
a) $\frac{12}{5}$ b) $\frac{5}{12}$ c) $\frac{5}{2}$ d) $\frac{2}{5}$
4. What is the equation of the line that contains $(-8, -8)$ and $(20, -1)$?
a) $y = -\frac{1}{2}x - 12$ b) $y = \frac{1}{2}x - 4$
c) $y = \frac{1}{4}x - 6$ d) $y = -\frac{1}{4}x - 10$
5. Which of the following is NOT a factor of the polynomial below?
 $2x^3 - 2x^2 - 24x$
a) 2 b) x c) $(x - 3)$ d) $(x - 4)$
6. Factor the following polynomial COMPLETELY:
 $3x^3 + 48x$
a) $x(3x^2 + 48x)$ b) $3x(x^2 + 16)$
c) $3(x^3 + 16x)$ d) $3x(x + 4)(x + 4)$
7. Factor the following polynomial COMPLETELY:
 $x^4 - 9x^2$
a) $9x^2(x^2 - 1)$ b) $9x^2(x + 1)(x - 1)$
c) $x^2(x + 3)(x - 3)$ d) $x^2(x^2 - 9)$
8. Determine the zeros of the given polynomial function:
 $f(x) = 5x^2 - 30x$
a) $x = -6, 0$ b) $x = 0, 6$
c) $x = -5, 6$ d) $x = -6, 5$
9. Determine the zeros of the given polynomial function:
 $f(x) = x^2 - 15x + 36$
a) $x = -7, -5$ b) $x = -12, -3$
c) $x = 3, 12$ d) $x = 5, 7$
10. Determine the zeros of the given polynomial function:
 $f(x) = x^2 + 5x - 6$
a) $x = -3, 2$ b) $x = -2, 3$
c) $x = -1, 6$ d) $x = -6, 1$