25.) If $h(y) = \dfrac{4 - y^2}{3 - y}$, which of the following is not defined?

a)   h(0)

b)   h(3)

c)   h(−3)

d)   h(2)

e)   h(−2)

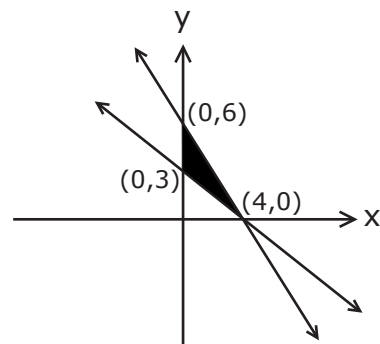26.) $\dfrac{2^{-2}+ 3^{-2}}{2^{-1}+ 3^{-1}} =$

a) $\dfrac{13}{30}$

b) $\dfrac{5}{6}$

c) $\dfrac{6}{5}$

d) $\dfrac{13}{5}$

e) $\dfrac{1}{5}$

27.) One factor of $4x^2 - 8x + 4$ is

a)   2x + 2

b)   x − 2

c)   x + 4

d)   x − 1

e)   x + 1

28.) Find the area of the shaded region between the lines.
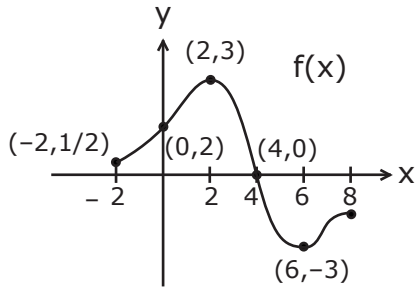
a)   4

b)   6

c)   8

d)   10

e)   12

29.) The slope of the line with the equation

y = −7x + 3 is

a)   3

b)   7

c) $-\dfrac{1}{7}$

d) $-\dfrac{3}{7}$

e)   − 7

30.) The function f(x) is graphed over the interval from x = −2 to x = 8 . Which statement is true about f(x) over the given interval?
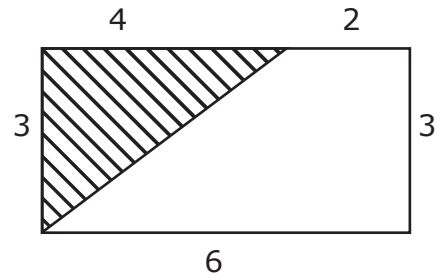

a) The largest value of the function is 8.

b) The maximum value of f(x) is $\frac{1}{2}$.

c) The solution to f(x) = 0 is 2 .

d) f(x) = 0 when x = 4 .

e) None of these

31.) 9 square yards is

a)   1 square foot   d)   81 square foot

b)   3 square foot   e)   243 square foot

c)   27 square foot

32.) One factor of $3x^2 + 6x + 3$ is

a)   3x + 1   d)   3x − 1

b)   x + 1   e)   x − 1

c)   x + 3

33.) What fraction of the rectangle's area is shaded?

a) $\frac{1}{5}$ d) $\frac{2}{5}$

b) $\frac{1}{4}$ e) $\frac{2}{3}$

c) $\frac{1}{3}$

34.) Solve for x :   ax − 3 = x + d

a)   x = $\frac{d + 3}{a - 1}$ d)   x = $\frac{d + 3}{a}$

b)   x = $\frac{a - 1}{d - 3}$ e)   x = $\frac{d - 3}{a - 1}$

c)   x = $\frac{d - 3}{a}$

35.) The amount of bacteria doubles every day. If there are 320 bacteria on day 6 , when will there be 5,120 bacteria?

a)   day 8   d)   day 14

b)   day 10   e)   day 16

c)   day 12