**Midterm Review Questions (Set 3)**

**1.** Write a rule for the function:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***x*** | –5 | 0 | 5 | 10 | 15 |
| ***y*** | 2 | –1 | –4 | –7 | –10 |

**2.** Translate the following verbal phrase:

 “The sum of a number and 3, less than 10 is at least 30”

**3.** What is 30% of 162?

**4.** 42 is 70% of what number?

**5.** 1450 is what percent of 6250?

**6.** Solve:

 7 – *m* = –9

**7.** Solve:

 $-\frac{3}{4}(x-5)=15$

**8.** Solve:

 $3\left(2x-4\right)=6(x-2)$

**9.** Solve:

 $4\left(8-6x\right)=-3(12+8x)$

**10.** Solve:

 $9\left(2+3x\right)=4.5(4-2x)$

**Answers:**

**1.** $y=-\frac{3}{5}x-1$

**2.** 10 – (*x* + 3) > 30

**3.** $x=48.6$

**4.** *x* = 60

**5.** $x=23.2\%$

**6.** *m* = 16

**7.** $x=-15$

**8.** any number

**9.** no solution

**10.** *x* = 0