

Defining Word Problems: Translating Sentences to Equations/Inequalities Worksheet 3

Translate each sentence into an equation. Use x to represent the number.

1) Five more than a number is 17.

$$\underline{5 + n = 17}$$

2) Five is 6 less than twice a number

$$\underline{5 = 2n - 6}$$

3) If seven is subtracted from six times a number, the result is 10.

$$\underline{6n - 7 = 10}$$

4) Ten more than number is 62.

$$\underline{10 + n = 62}$$

5) The sum of three times a number and twelve is twenty.

$$\underline{3n + 12 = 20}$$

6) The sum of a number and 7 is 35.

$$\underline{n + 7 = 35}$$

7) One-half of a number equals sixteen.

$$\underline{\frac{1}{2}n = 16}$$

8) The sum of a number and thirteen is 22.

$$\underline{n + 13 = 22}$$

9) The sum of four and twice a number is 52.

$$\underline{4 + 2n = 52}$$

10) Ten times a number is 420.

$$\underline{10n = 420}$$

11) Five times a number is 120.

$$\underline{5n = 120}$$

12) The sum of five and twice a number is 17.

$$\underline{5 + 2n = 17}$$

13) If 3 times a number is decreased by 12, the result is 5.

$$\underline{3n - 12 = 5}$$

14) Five more than a number is seventeen.

$$\underline{5 + n = 17}$$

15) The sum of 6 times a number and fifteen is forty-two.

$$\underline{6n + 15 = 42}$$

16) If 5 times a number is decreased by 12, the difference is 9.

$$\underline{5n - 12 = 9}$$

Translate each sentence into an inequality. Use x to represent the number.

17) Five more than a number is less than 17.

$$\underline{5 + n < 17}$$

18) Five is greater than 6 less than twice a number

$$\underline{5 > 2n - 6}$$

19) If seven is subtracted from six times a number, the result is at least 10.

$$\underline{6n - 7}$$

20) Ten more than number is no more than 62.

$$\underline{10 + n < 62}$$

21) The sum of three times a number and twelve is fewer than twenty.

$$\underline{3n + 12 < 20}$$

22) The sum of a number and 7 is no more than 35.

$$\underline{n + 7 < 35}$$

23) One-half of a number is less than sixteen.

$$\underline{\frac{1}{2}n < 16}$$

24) The sum of a number and thirteen is greater than 22.

$$\underline{n + 13 > 22}$$

25) The sum of four and twice a number at least 52.

$$\underline{4 + 2n \geq 52}$$

26) Ten times a number is at most 420.

$$\underline{10n \leq 420}$$

27) Five times a number is fewer than 120.

$$\underline{5n < 120}$$

28) The sum of five and twice a number is at most 17.

$$\underline{5 + 2n \geq 17}$$

29) If 3 times a number is decreased by 12, the result is more than 5.

$$\underline{3n - 12 > 5}$$

30) Five more than a number is at most seventeen.

$$\underline{5 + n \geq 17}$$

31) The sum of 6 times a number and fifteen is no more than forty-two.

$$\underline{6n + 15 \geq 42}$$

32) If 5 times a number is decreased by 12, the difference is at least 9.

$$\underline{5n - 12 > 9}$$