

## Identify Linear Functions (Equations)

Name: \_\_\_\_\_

Determine if the equation shown represents a linear function (yes) or not (no).

**Answers**

1)  $Y = \sqrt{X^2 - 9}$

1. \_\_\_\_\_

2)  $Y = \sqrt{X^2 - 7}$

2. \_\_\_\_\_

3)  $Y = 5 \times X - (X \times 1)$

3. \_\_\_\_\_

4)  $Y = \sqrt{X^2 - 2}$

4. \_\_\_\_\_

5)  $Y = \sqrt{X^2 - 3}$

5. \_\_\_\_\_

6)  $Y = -X - 4$

6. \_\_\_\_\_

7)  $Y = \sqrt{X^2 - 4}$

7. \_\_\_\_\_

8)  $Y = \sqrt{X^2 - 4}$

8. \_\_\_\_\_

9)  $Y = 5 \times X + 5^2$

9. \_\_\_\_\_

10)  $Y = \frac{X}{8} \times 5$

10. \_\_\_\_\_

11)  $Y = 7 \times X - (X + 5)$

11. \_\_\_\_\_

12)  $Y = X + 6$

12. \_\_\_\_\_

13)  $Y = \sqrt{X^2 - 2}$

13. \_\_\_\_\_

14)  $Y = -X + 4$

14. \_\_\_\_\_

15)  $Y = -X$

15. \_\_\_\_\_

16)  $Y = \sqrt{X^2 - 7}$

16. \_\_\_\_\_

17)  $Y = \sqrt{X^2 - 8}$

17. \_\_\_\_\_

18)  $Y = 5 + X$

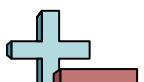
18. \_\_\_\_\_

19)  $Y = \sqrt{X^2 - 6}$

19. \_\_\_\_\_

20)  $Y = \sqrt{X^2 - 5}$

20. \_\_\_\_\_



## Identify Linear Functions (Equations)

Name: **Answer Key**

Determine if the equation shown represents a linear function (yes) or not (no).

1)  $Y = \sqrt{X^2 - 9}$

1. **no**

2)  $Y = \sqrt{X^2 - 7}$

2. **no**

3)  $Y = 5 \times X - (X \times 1)$

3. **yes**

4)  $Y = \sqrt{X^2 - 2}$

4. **no**

5)  $Y = \sqrt{X^2 - 3}$

5. **no**

6)  $Y = -X - 4$

6. **yes**

7)  $Y = \sqrt{X^2 - 4}$

7. **no**

8)  $Y = \sqrt{X^2 - 4}$

8. **no**

9)  $Y = 5 \times X + 5^2$

9. **yes**

10)  $Y = \frac{X}{8} \times 5$

10. **yes**

11)  $Y = 7 \times X - (X + 5)$

11. **yes**

12)  $Y = X + 6$

12. **yes**

13)  $Y = \sqrt{X^2 - 2}$

13. **no**

14)  $Y = -X + 4$

14. **yes**

15)  $Y = -X$

15. **yes**

16)  $Y = \sqrt{X^2 - 7}$

16. **no**

17)  $Y = \sqrt{X^2 - 8}$

17. **no**

18)  $Y = 5 + X$

18. **yes**

19)  $Y = \sqrt{X^2 - 6}$

19. **no**

20)  $Y = \sqrt{X^2 - 5}$

20. **no****Answers**

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0