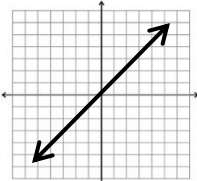
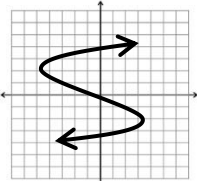
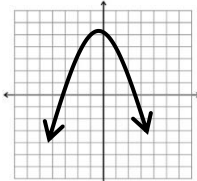
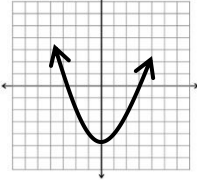
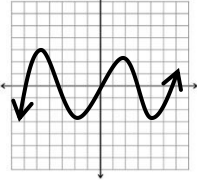
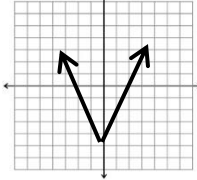
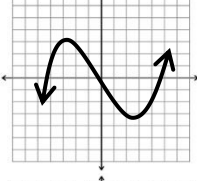
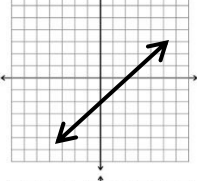
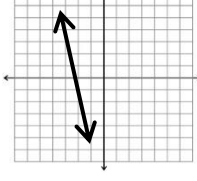
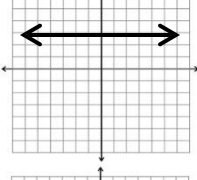
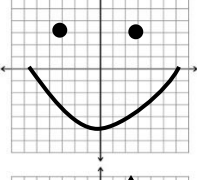
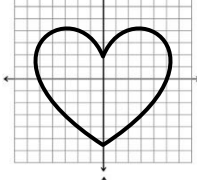
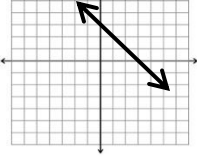
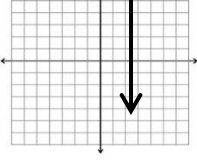



## Linear or Not? Worksheet

**Are the following equations linear?**

- |                                |                     |                    |
|--------------------------------|---------------------|--------------------|
| 1. $y = x$                     | 2. $y = x^2$        | 3. $y = x^3$       |
| 4. $y = x - 4$                 | 5. $y = x(x - 4)$   | 6. $y = (x - 4)^2$ |
| 7. $y = (x - 4)(x + 2)$        | 8. $y = -x$         | 9. $y = -x^2$      |
| 10. $y = -x(x + 9)$            | 11. $y = -x^4$      | 12. $y =  x $      |
| 13. $y = 6x^2 + x + 1$         | 14. $y = x - 3x^2$  | 15. $y = 6x - 3x$  |
| 16. $y = 4x - 5x + 7x + x - 2$ | 17. $y = 2x^2 - 3x$ | 18. $y = (x-1)x$   |

**Are the following graphs linear?**

- |   |   |   |
|---|---|---|
| 19.  | 20.  | 21.  |
| 22.  | 23.  | 24.  |
| 25.  | 26.  | 27.  |
| 28.  | 29.  | 30.  |
| 31.  | 32.  | 33.  |

Name \_\_\_\_\_ Class \_\_\_\_\_

Are the following tables linear?

34.

x	y
0	5
1	7
2	9
3	11

35.

x	y
-2	2
-1	1
0	0
1	1
2	2

36.

x	y
-2	5
-1	10
0	15
1	20
2	25

37.

x	y
0	0
4	4
8	8

38.

x	y
3	6
4	7
5	8

39.

x	y
0	0
1	1
2	4
3	9

40.

x	y
0	0
1	1
2	8
3	27

41.

x	y
-6	2
-3	4
0	6
3	8
6	10

42.

x	y
2	9
4	15
6	27