

HW 24

plus

6. $y = 5x - 6$

X: $-y = 5x - 6$ no

Y: $y = 5(-x) - 6$
 $y = -5x - 6$ no

O: $-y = 5(x) - 6$
 $-y = -5x - 6$
 $y = 5x + 6$ no

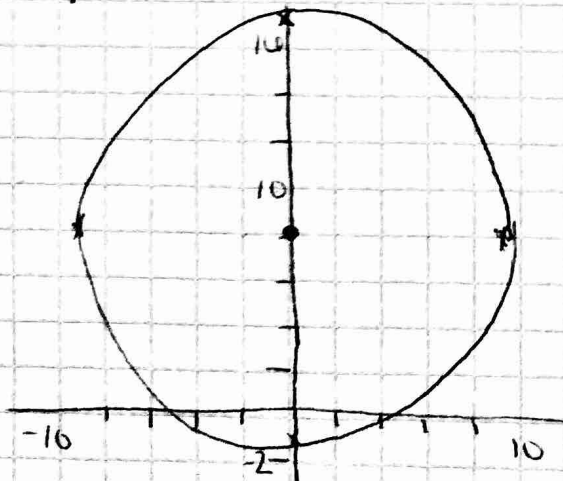
8. $y = x^2 + 2$

X: $-y = x^2 + 2$ no

Y: $y = (-x)^2 + 2$
 $y = x^2 + 2$ ✓

O: $-y = (-x)^2 + 2$
 $-y = x^2 + 2$ no

16. C: (0, 8)
 $r = 9$



21. $6 - (x^2 - 4x + 4)$
 $6 - x^2 + 4x - 4$
 $-x^2 + 4x + 2$ yes identity

22. $3x - 6 + 2x = 2x + 6$
 $5x - 6 = 2x + 6$
 no conditional

25. $5x = 25$
 $x = 5$

26. $4x = -20$
 $x = -5$

33. $y = 2(0 - 4)$ (0, -8)
 $y = -8$

O: $2(x - 4)$ (4, 0)
 $0 = x - 4$
 $4 = x$

34. $y = 4(7 \cdot 0 + 1)$ (0, 4)
 $y = 4$

O: $4(7x + 1)$
 $0 = 7x + 1$ (-1/7, 0)
 $-1 = 7x$
 $-1/7 = x$

40. $x \cdot r = \text{new}$
 $\uparrow \quad \uparrow \quad \uparrow$
 old rate new

$425 \cdot r = 340$
 $r = 0.8$

↓
 20% sale

$$43. 10(.3) + x = 0.5(10+x)$$

$$3 + x = 5 + 0.5x$$

$$0.5x = 2$$

$$x = 4$$

$$44. 0.045x + 0.055(4000 - x) = 305$$

$$0.045x + 330 - 0.055x = 305$$

$$-0.01x = -25$$

$$x = 2500$$

2500 in 4.5% & 3500 in 5.5%

$$45. V = \frac{1}{3}\pi r^2 \cdot h$$

$$3V = \pi r^2 h$$

$$\frac{3V}{\pi r^2} = h$$

$$46. E = \frac{1}{2}mv^2$$

$$\frac{2E}{v^2} = m$$