Harder Parabola Equations #1

Write equations for the following parabolas:

1.

2.

3.

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10.
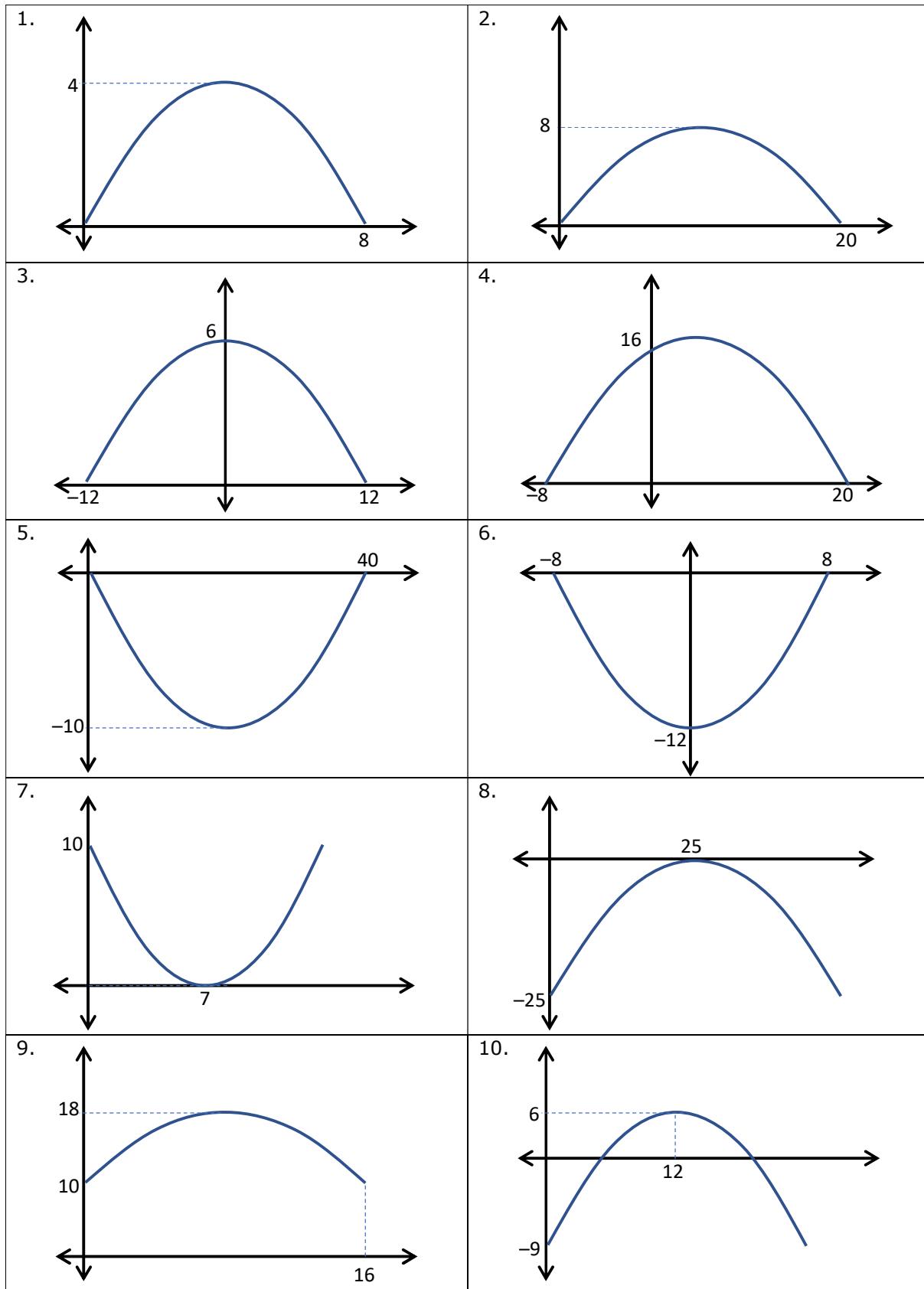
Harder Parabola Equations #1 – Answers

		Intercept method	Turning point method

1. $m = \dfrac{4}{-16}$ $y = -0.25\,x\,(x - 8)$ $y = -0.25\,(x - 4)^2 + 4$

2. $m = \dfrac{8}{-100}$ $y = -0.08\,x\,(x - 20)$ $y = -0.08\,(x - 10)^2 + 8$

3. $m = \dfrac{6}{-144}$ $y = \dfrac{-1}{24}\,(x + 12)(x - 12)$ $y = \dfrac{-1}{24}\,x^2 + 6$

4. $m = \dfrac{16}{-160}$ $y = -0.1\,(x + 8)(x - 20)$

5. $m = \dfrac{-10}{-400}$ $y = 0.025\,x\,(x - 40)$ $y = 0.025\,(x - 20)^2 - 10$

6. $m = \dfrac{-12}{-64}$ $y = \dfrac{3}{16}\,(x + 8)(x - 8)$ $y = \dfrac{3}{16}\,x^2 - 12$

7. $m = \dfrac{10}{49}$ $y = \dfrac{10}{49}\,(x - 7)^2$

8. $m = \dfrac{-25}{625}$ $y = -0.04\,(x - 25)^2$

9. $m = \dfrac{8}{-64}$ $y = -0.125\,x\,(x - 16) + 10$ $y = -0.125\,(x - 8)^2 + 18$

10. $m = \dfrac{15}{-144}$ $y = \dfrac{-5}{48}\,x\,(x - 24) - 9$ $y = \dfrac{-5}{48}\,(x - 12)^2 + 6$