MRS21-HW-10

Please select the correct answer number for each question. There are more answers than questions. Answers may be repeated.

$$_{1)} x = -4$$

₂₎ 793.6 ft-lb

$$_{3)} x = \sqrt[3]{\frac{3}{2}} - 1$$

4)

No; she used a quadratic that has additional real zeros; she should have used $x^2 + 1$ as her quadratic.

Answers may vary. Sample:

$$y = x^4 + 8x^3 + 16x^2 + 8x + 15$$

$$y = \frac{1}{3}(-x)^3 + 6$$

7)

yes; vertical stretch by a factor of 2, horizontal translation 3 units right, vertical translation 4 units up

Answers may vary. Sample:

$$y = (x-2)^4-1$$

9) about 48.7 ft/s²

$$y = -(x-2)^3 - 3$$

₁₁₎ 24.8

₁₂₎ about 5.6 ft/s