

MATH 0482

Chapter 5.2 Simplifying Radical Expressions

SIMPLIFY.

$$\sqrt[3]{27x^3}$$

$$\sqrt[4]{16y^4}$$

$$\sqrt{12x^6y^3}$$

$$\sqrt{\frac{18a^5}{b^8}}$$

Simplify.

$$\sqrt[3]{80x^5y^7}$$

$$\sqrt[3]{\frac{9x^6}{y^3z^9}}$$

$$\sqrt[4]{81a^4b^5}$$

$$\sqrt[5]{-32x^3y^6z^5}$$

PERIOD (TIME TO SWING TO ONE SIDE AND BACK) OF A PENDULUM

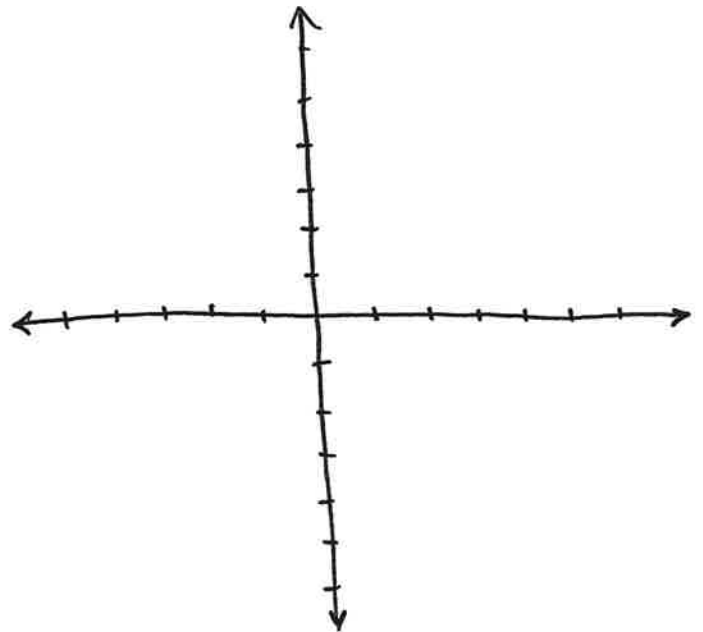
$$T = 2\pi \sqrt{\frac{L}{32}}$$

T: PERIOD IN SECONDS

L: LENGTH IN FEET

IF THE PENDULUM'S LENGTH IS 1.5 ft, FIND THE PERIOD.

FIND THE DISTANCE BETWEEN $(-5, 3)$ AND $(1, 1)$.



FIND THE DISTANCE BETWEEN $(-4, 7)$ AND $(2, 1)$. $d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

DO THE THREE POINTS $(2, -1)$, $(3, 2)$ AND $(8, -3)$ FORM A RIGHT TRIANGLE?