# Pg 155 #27 & 29; Pg 162 -163 #3, 5-7, 10, 11, 14
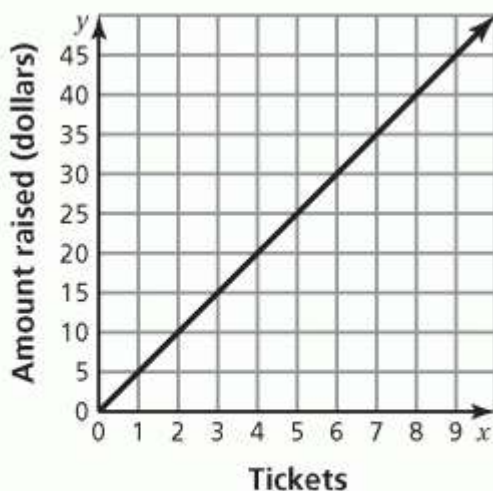
**27.** $k = 11$

**29.** $k = -5$

'

**3.** no; *Sample answer:* The graph of the equation does not pass through the origin.

**5.** yes; $y = \frac{1}{3}x$; *Sample answer:* The rate of change in the table is constant.

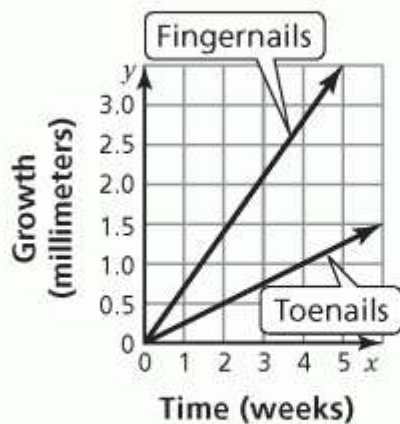**6.** no; *Sample answer:* The rate of change in the table is not constant.

**7.**



Each ticket costs $5.

**10.** **a.** fingernails; Fingernails grow about 0.7 millimeter per week and toenails grow about 0.25 millimeter per week.

**b.**



Time (weeks)

The graph that represents fingernails is steeper than the graph that represents toenails. So, fingernails grow faster than toenails.

**11.** See *Taking Math Deeper.*

**14.**



$$y = -\frac{1}{2}x$$