

Check the Starting Value

Reteach equal additions do not remove a starting amount

In a supplied model, a tank starts with 4 liters and gains 2 liters each minute. Its time/total pairs include (0, 4), (1, 6), (2, 8). The total rule is $y = 2 \times x + 4$. The positive-time quotients are 6 and 4 liters per minute, not one constant. The graph starts at (0, 4). The amount added is $2 \times x$; total water includes the starting 4 liters.

Your different practice

For 0 to 4 minutes, a different tank starts with 2 liters and gains 3 liters each minute. Use total water.

Time (minutes)	Total water (liters)
0	2
1	5
2	8
4	14

Compare two positive-time quotients. Is total water proportional to time? Write its rule and explain the point at zero. Separately write the rule for water added after filling begins. Which relationship is proportional? Explain why the choice of output matters.

Total, added water and reasoning