

NAME:

DATE:

A \$2,736

$$2400(1+r)^7$$

$$2400(1+.02)^7$$

$$2400(1+.14)$$

$$2400(1.14) = 2736$$

$$= \$2,736$$

B \$2,757

$$= 2400(1.02)^7$$

$$= 2400(1.148686)$$

$$\approx 2757$$

$$= \$2,757$$

C \$17,136

$$2400(1.02)^7$$

$$= 2400(7.14) = 17136 \checkmark$$

$$= \$17,136$$

Problem:
Euclid put \$2400 in a savings account earning 2% interest compounded annually 7 years ago. How much money is in his account now (to the nearest dollar)?

D \$307,200

$$2400(2)^7$$

$$= 2400(128) = 307,200 \checkmark$$

$$= \$307,200$$

NAME:

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A 6,000 crickets

$$250(2)^x$$

$$250(2)^{6 \times 2}$$

$$250(2)^{12}$$

$$250(24) = 6000 \checkmark$$

= 6000 crickets

C 4,000 crickets

0 6mo 1yr 1.5yrs 2yrs

$$250 \rightarrow 500 \rightarrow 1000 \rightarrow 2000 \rightarrow 4000 \checkmark$$

= 4000 crickets

B 1,250 crickets

0 6mo 1yr 1.5yrs 2yrs

$$250 \rightarrow 500 \rightarrow 750 \rightarrow 1000 \rightarrow 1250 \checkmark$$

= 1250 crickets

D 2,000 crickets

$$250(2)^{1+n}$$

$$250(2)^{1+2}$$

$$250(2)^3$$

$$250(8) = 2000 \checkmark$$

= 2000 crickets

Problem:
Suppose a population of 250 crickets doubles in size every 6 months. How many crickets will there be after 2 years?