

## 5.NBT.B.5 Estimating Products Up to Five Digits

5.NBT.B.5: Fluently multiply multi-digit whole numbers using the standard algorithm.

1. Round each factor to the greatest place value then multiply to estimate the product.

- a.  $356 \times 245$
- b.  $824 \times 517$
- c.  $135 \times \$384$
- d.  $7,350 \times 41,632$
- e.  $33 \times 52,134$
- f.  $6,250 \times \$42,216$
- g.  $31 \times \$85,742$
- h.  $1,867 \times 9,274$

Answers:

- a.
- b.
- c.
- d.
- e.
- f.
- g.
- h.

2. A school supplies shop sold 5,328 packs of pencils in a month. The store sells a pack for \$9.75 each. About how much money did the shop collect from packs of pencils sold?

Answer:

3. It will cost \$6,582 to build a row house. How much will it cost to build 95 row houses?

Answer:

4. Lorie's family has helped 12,450 unfortunate families this year. How many families will they be able to help if they plan to help the same number of families throughout the next 18 years?

Answer:

5. About how much will be the price of 48 chairs if the price of each chair is \$32.18?

Answer:

6. Estimate the product of 2,842 and 124. Is it an overestimate or an underestimate? Explain.

Answer:

7. A museum's daily visitor count is about 2,491. About how many visitors visit the museum in a year?

Answer:

8. A school bus travels about 3,450 miles a month. About how many miles does the bus travel in a year?

Answer:

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### Answer Key

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1. Round each factor to the greatest place value then multiply to estimate the product.

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- g.  $31 \times \$85,742$
- h.  $1,867 \times 9,274$

Answers:

- a. 80,000
- b. 400,000
- c. \$40,000
- d. 280,000,000
- e. 1,500,000
- f. \$240,000,000
- g. \$2,700,000
- h. 18,000,000

2. A school supplies shop sold 5,328 packs of pencils in a month. The store sells a pack for \$9.75 each. About how much money did the shop collect from packs of pencils sold?

Answer:  
\$50,000

3. It will cost \$6,582 to build a row house. How much will it cost to build 95 row houses?

Answer:  
\$700,000

4. Lorie's family has helped 12,450 unfortunate families this year. How many families will they be able to help if they plan to help the same number of families throughout the next 18 years?

Answer:  
200,000 families

5. About how much will be the price of 48 chairs if the price of each chair is \$32.18?

Answer:  
 $48 \times \$30 = \$1,440$

6. Estimate the product of 2,842 and 124. Is it an overestimate or an underestimate? Explain.

Answer:  
300,000; it is an underestimate because the actual product is 352,408.

7. A museum's daily visitor count is about 2,491. About how many visitors visit the museum in a year?

Answer:  
 $2500 \times 365 = 912,500$  visitors or 900,000 visitors

8. A school bus travels about 3,450 miles a month. About how many miles does the bus travel in a year?

Answer:  
 $3500 \times 12 = 42,000$  miles