Name _____

Practice Video Tools Games

Additional Practice 4-2

Estimate the Product of a Decimal and a Whole Number

Another Look!

Zane needs to buy 27 party favors for the family reunion. The favors cost $2.98 each. About how much will the party favors cost in all?

Here are two ways you can estimate.

Round both numbers.

$2.98 × 27

↓ ↓

$3 × 30 = $90

The favors will cost about $90.

Replace the factors with compatible numbers and multiply mentally.

$2.98 × 27

↓ ↓

$3 × 25 = $75

The favors will cost about $75.

Since 27 is between 25 and 30, the total cost will be between $75 and $90.

1. Round to the greatest place to estimate 23×1.75.

23 × 1.75

↓ ↓

____ ____

So, 23×1.75 is about ____

2. Use compatible numbers to estimate 12×0.49.

12 × 0.49

↓ ↓

____ ____

So, 12×0.49 is about ____

In **3–14**, estimate each product.

3. 19.3×6

4. 345×5.79

5. 9.66×0.46

6. 8.02×70

7. 1.56×48

8. 45.1×5

9. 0.13×11

10. 99.7×92

11. 147×10.4

12. 23.7×4.76

13. 3×0.85

14. 0.35×9

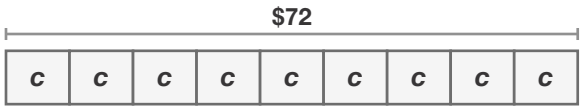
15. Can Mrs. Davis and her two sisters get their hair colored for less than $100 if they include a $10 tip? Explain.

16. If Mrs. Davis and her sisters also get haircuts, about how much will they pay in all?

17. Reasoning Mrs. Smith bought her three children new raincoats. Each raincoat cost $25.99. About how much did Mrs. Smith spend on the 3 raincoats? Is your estimate an overestimate or underestimate? Write an equation to show your work.

18. Higher Order Thinking Some Native American tribes made jewelry with Dentalia shells. Each Dentalia shell is about 1.5 inches long. About how much longer would a necklace made with 24 shells be than a necklace made with 18 shells? Use compatible numbers.

19. Algebra A youth hockey league is selling boxes of popcorn to raise money for new uniforms. Sidney sold 9 boxes for a total of $72 in sales. Use the bar diagram and write an equation to find the value of *c*, the cost of each box Sidney sold.



Assessment Practice

20. Rounding to the nearest tenth, which of the following give an **overestimate**?

- ☐ 37.63×0.54
- ☐ 54.49×0.45
- ☐ 1.19×1.45
- ☐ 0.81×8.01
- ☐ 27.83×13.64

21. Rounding to the nearest whole number, which of the following give an **underestimate**?

- ☐ 2.7×13.5
- ☐ 4.51×8.7
- ☐ 9.19×8.48
- ☐ 7.49×11.4
- ☐ 3.6×6.5

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