LESSON MAKER PRO

Split to Divide

Use easy parts and multiplication facts to find quotients.

GRADE 5 · 5.NOS.B.5.c

5.NOS.B.5.c "Use properties of operations and/or the inverse relationship between multiplication and division to divide."

NAME _____ DATE _____

THE BIG IDEA

You can break a number into parts that are each easy to divide by the same divisor. Divide each part, then add the quotients. Check your answer by multiplying it by the divisor.

WORKED EXAMPLE

Find 156 / 6.

1. Split 156 into 120 + 36.
2. Divide each part: 120 / 6 = 20 and 36 / 6 = 6.
3. Add the quotients: 20 + 6 = 26.

Answer: 156 / 6 = 26

PRACTICE 6 problems

1 84 / 3 = ___

ANSWER _____

2 96 / 4 = ___

ANSWER _____

3 135 / 5 = ___

ANSWER _____

4 144 / 8 = ___

ANSWER _____

5 189 / 9 = ___

ANSWER _____

6 255 / 5 = ___

ANSWER _____

APPLY IT Show your work

1 A game club has 248 prize tickets to put into 8 equal packs for a tournament. How many tickets go in each pack?

WORK SPACE

ANSWER _____

2 A team earns 315 points over 9 rounds of a video game. It scores the same number of points in each round. How many points does it score per round?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Find 1,232 / 8. Explain your answer by splitting 1,232 into easy parts, then check it with multiplication.

WORK SPACE AND ANSWER

ANSWER KEY

Split to Divide

GRADE 5 · 5.NOS.B.5.c

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	84 / 3 = ___	**28**
2	96 / 4 = ___	**24**
3	135 / 5 = ___	**27**
4	144 / 8 = ___	**18**
5	189 / 9 = ___	**21**
6	255 / 5 = ___	**51**

PART 2 · APPLY IT

1. **31 tickets** Split 248 into 240 + 8. Then 240 / 8 + 8 / 8 = 30 + 1 = 31.
2. **35 points** Split 315 into 270 + 45. Then 270 / 9 + 45 / 9 = 30 + 5 = 35.

CHALLENGE

1,232 / 8 = 154 because (800 / 8) + (400 / 8) + (32 / 8) = 100 + 50 + 4. I checked: 154 × 8 = 1,232.

Accept any split into parts that divide evenly by the divisor. For the challenge, the multiplication check must equal 1,232.