STUDY LINK 4·4 Division

Here is an example of the partial-quotients algorithm using an "at least...not more than" strategy.

SRB
22 23

```
8)185
```

Begin estimating with multiples of 10.

```
− 80    10
 105
```

How many 8s are in 185? At least 10.
The first partial quotient. 10 * 8 = 80
Subtract. 105 is left to divide.

```
− 80    10
  25
```

How many 8s are in 105? At least 10.
The second partial quotient. 10 * 8 = 80
Subtract. 25 is left to divide.

```
− 24     3
```

How many 8s are in 25? At least 3.
The third partial quotient. 3 * 8 = 24
Subtract. 1 is left to divide.

```
   1    23
   ↑     ↑
```

Add the partial quotients: 10 + 10 + 3 = 23

Remainder Quotient   Answer: 23 R1

Solve.

1. 639 ÷ 9

Answer: _____

2. 954 ÷ 18

Answer: _____

3. 1,990 / 24

Answer: _____

4. 972 / 37

Answer: _____

5. Robert is making a photo album. 6 photos fit on a page. How many pages will he need for 497 photos? _____ pages

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Practice

6. 2,746 + 68 = _____

Check: _____ − _____ = _____

7. 3,461 − 165 = _____

Check: _____ + _____ = _____