Multiplying Two Decimals

Caroline earns $2.40 per hour for babysitting her brother. She babysat last night for 3.25 hours. How much did she earn?

First, estimate your product so you can check for reasonableness.

$2.40 $\times$ 3.25

$\downarrow$ $\downarrow$

$2 $\times$ 3 = 6   Caroline earned about $6.00.

Step 1: Multiply each factor by powers of 10 to create whole numbers. Then multiply these numbers.

$2.40 \times 10^2 = 240$
$3.25 \times 10^2 = 325$

```
       325
  ×    240
       000
    13,000
  +65,000
    78,000
```

Step 2: Because you multipled each factor by 10^2, you must divide your answer by 10^2 two times.

$78,000 \div 10^4 = 7.8000$

$7.8000 = 7.80

Caroline earned $7.80 last night. Because $7.80 is close to your estimate of $6, your answer is reasonable.

Find each product. Check by estimating.

1. 0.2 $\times$ 4.6 _____
2. 3.9 $\times$ 7.1 _____
3. 8.54 $\times$ 0.1 _____

4. 0.53 $\times$ 6.4 _____
5. 9.3 $\times$ 5.86 _____
6. 0.37 $\times$ 4.4 _____

7. Jackie wants to buy a new CD player. It costs $32.95. She has saved $26 and has a coupon for 30% off the price. Does Jackie have enough money to buy the CD player?

_____

_____

_____