

**Math Essentials 10 Teacher Learning Centre  
Answer Links**

**<Section 2.1 Answers>**

**Answers to Activity Questions (pages 35–36)**

Answers will vary depending on the HST rate.

Example for 13% HST:

**Method 1:** 13%

Step 1: \$180; Step 2: \$18; Step 3: \$1.80;

Step 4: 3; Step 5: \$23; Step 6: \$203; NO

**Method 2:** 13%

Step 1: \$180; Step 2: \$18; Step 3: \$9;

Step 4: \$27; Step 5: \$207; NO

1. Example: Method 2 is easier because there are fewer calculations and it is easier to determine 5% than  $3 \times 1\%$ .

2. a) \$60, \$9, \$69

b) \$79, \$12, \$91

c) \$150, \$23, \$173

d) \$250, \$38, \$288

3. a) \$7.79

b) \$10.24

c) \$19.50

d) \$32.50

4. Look for a reasonable justification. Example:  
My estimates are a little higher than the calculated taxes. That's because I used 15% (instead of 13%) to estimate the HST.

5. a) \$67.74

b) \$88.73

c) \$169.49

d) \$282.49

**<Section 2.2 Answers>**

**Answers to Activity Questions (pages 39–41)**

1. Method 1: Step 2:  $0.25 \times 40 = \$10$   
Method 2: Step 2: 25%
2. a) \$36, \$9, \$27  
b) \$32, \$8, \$24  
c) \$30, \$8, \$23
3. a) \$60, 75%, \$45  
b) \$12, 75%, \$9  
c) \$79, 75%, \$59
4. a) \$28.99 rounds up to \$30.  
30% is almost  $\frac{1}{3}$ .  
 $\$30 \div 3 = \$10$  (discount)  
 $\$30 - \$10 = \$20$  (sale price)  
b) She divided by 3 to estimate the discount  
because  $\frac{1}{3}$  is almost 30%.
5. Look for correct estimates and calculations for the sale price of 3 items. Missing title: Percent Discount
6. a) \$38.69, \$43.72  
b) \$18.31, \$20.69  
c) \$8.80, \$9.94  
d) \$33.15, \$37.46

<Section 2.3 Answers>

Answers to Activity Questions (pages 43–45)

1. a) \$6.35
- b) \$0.83
- c) \$7.18

2. Example:

Menu Items	Prices	Total Price	HST	Amount to Pay
a) Caesar salad	\$1.75	\$5.15	\$0.67	\$5.82
Cheese sandwich	\$2.00			
Milk	\$1.40			
b) Soft beef taco	\$3.00	\$4.25	\$0.55	\$4.80
Bottled water	\$1.25			

3. \$1.89
4. Example: a) \$4.05
- b) about \$35
5. Example:  $\$5 + \$2 = \$7$ ; Tax: \$1.05; Tip \$1.05;  
Total: \$9.10; Aneesha should put in about \$9.
6. Example:  $\$7 + \$2 + \$2 = \$11$ ; Tax: \$1.65;  
Tip \$1.65; Total: \$14.30; Henry should put in  
about \$14.
7. Example: a)  $\$12 + \$9 + \$14 = \$35$
- b) The amount is very close.
- c) Carlos: \$11.24. The estimate is almost \$1.00  
too high.  
Aneesha: \$9.18 The estimate is about \$0.20 too  
low.  
Henry: \$14.76. The estimate is almost \$1 too  
low.

<Section 2.4 Answers>

Answers to Activity Questions (pages 46–49)

Answers reflect HST at 13%.

1. Example: Option A is the least expensive because an estimation of Option A is \$108, Option B is \$115, and Option C is \$112.
2. Option A: \$120, \$108  
Option B: \$230, \$115  
Option C: \$150, \$112.50  
Example: a) YES  
b) Option A has the best price.  
c) \$122.04
3. Option A: \$1680  
Option B: \$2466.75  
Option C: \$2088  
a) \$1898.40  
b) Examples: quality, safety, guarantees, warranties
4. Example: a) \$54.00  
b) \$50.00  
c) Megan should buy the stick in question 4b). It costs less, and since it was more expensive before the sale, it may be of better quality.
5. YES. The total cost is \$180.98 and he has \$200.
6. Example:  $\$141 + \$18 = \$159$
7. a)  $\$200 - \$50 - \$159 = -\$9$   
b) Naomi spent less than she had available in her budget.  
c) Naomi spent more than she had available in her budget.

<Section 2.5 Answers>

Answers to Activity Questions (pages 51–53)

1. a) Example: A; Brand A has the best results.  
b) C; 79%  
c) Example: about 2 times; about 3 times  
d) 16%
- 2.



- a) They may prefer the second graph because it makes the results look closer.
  - b) The second graph represents the data more fairly because you can clearly compare the quantities.
3. a) Movie rental prices are dropping.  
b) \$0.20  
c) (4, 3.85), (2, 3.95), (This Year, 3.75)

4. a) \$0.00

b)



5. Example: The range of the vertical axis can make it appear as if there are greater differences between the points or bars than there actually are.

6. a) YES

b) The narrow dollar sign in the first graph makes this year's fee seem smaller because the symbol appears much smaller in size compared to last year's symbol.

### <Chapter 2 Review Answers>

#### Answers to Chapter 2 Review (pages 54–55)

Answers reflect HST at 13%.

1. a) budget

b) discount

c) sale price

d) HST

e) tip

2. Example:

a) \$12, \$1.80, \$13.80

b) \$9, \$1.35, \$10.35

c) \$3, \$0.45, \$3.45

3. \$300

4. a) \$11.44, \$1.49, \$12.93

b) \$1.72

5. a) Yes. Since the 20% discount is greater than the 13% tax, it would make sense that the sale price, with tax, is less than the original price.

b) \$17.13

6. Look for 2 reasons. Example:

- The graph starts at \$245 000 instead of \$0 to make the differences in sales appear greater than they are.
- The title gives the impression that sales have increased dramatically.