

Team names: _____

Application Exercise 1

Item	Description	Quantity	Price
	Wholemeal Grain Bread	2	
	Wholemeal & Grain Soft Wraps 8 pack	1	
	Fresh Full Cream Milk	4 x 2L	
	Tasty Cheese Block	1kg	
	Crinkle Cut Frozen Potato Chips	1kg	
	Crumbed Frozen Fish Fillets	1kg	
	Baby Spinach Leaves Prepacked	120g	
	Bananas	4	
	Broccoli	340g	
	Carrots Prepacked	1kg	
	Iceberg Lettuce	1	
	Pink Lady Apples Prepacked	1kg	

Item	Description	Quantity	Price
	Snow Peas loose	100g	
	Strawberries Prepacked	2 × 250g	
	Yellow Peaches	8	
	BBQ Sausages	1.8kg	
	Beef Fajita Strips	500g	
	Shaved Leg Honey Ham	150g	
	Chocolate Nut Bars	1	
	Oat Flakes	1	
		Total	

For this family shopping list, which estimate is most accurate?

- (A) \$85.37
- (B) \$96.48
- (C) \$107.59
- (D) \$118.70

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Application Exercise 2

Four Fours is a mathematical puzzle. The goal is to find the simplest expressions, using only four 4s, for as many whole numbers as possible. We will use two positive and two negative 4s.

For example:

$$4 + -4 + 4 + -4 \text{ and } -44 - -44 \text{ both equal } 0$$

but the second expression uses only one operation.

All three of these expressions equal 1:

$$-4 \div 4 \times -4 \div 4 = -44 \div -44 = (-4 - -4 + 4) \div 4 = 1$$

Find expressions for each of these numbers:

Which number has the simplest expression?

- (A) 3
- (B) 4
- (C) 5
- (D) 7