7.2 Gross Pay – Practice Problems

1. Matthew has a part-time job that pays $358 per week. He wants to get another job so that he will earn $28000 per year. How much does he need to earn bi-monthly at his other job?

$358 × 52 = $18 616
28 000 − 18 616 = $9384
$9384 ÷ 24 = $391

$$\boxed{\$391 \text{ bi-monthly}}$$

2. Denzel works at a tire manufacturing plant and earns $10.20/h on day shift. When he works the evening or night shift, he earns a shift premium of $1.15/h. Last month he worked 80 h on day shift, 40 h on evenings, and 40 h on nights. What was his gross income for the month?

$10.20 × 80h = $816
$10.2 + $1.15 = $11.35
$11.35 × 80h = $908

$$\$816 + \$908 = \boxed{\$1724}$$

3. Aniela works at a library and earns $10.75/h for 30h a week plus 3% vacation pay. Hannah works at a sporting goods store and earns $11.45/h for 35h a week. Who had the higher gross income for the week and by how much?

Aniela : $10.75 × 30 = $322.5
$322.5 × 0.03 = $9.68
$322.5 + 9.68 = $332.18

Hannah : $11.45 × 35h = $400.75

$400.75 − $332.18 = $68.57

$$\boxed{\text{Hannah made } \$68.57 \text{ more than Aniela this week}}$$

4. Vince earns $12.25/h as a taxi driver working an average of 50 h each week. He usually earns $90 in tips each week and works 50 weeks each year. What is Vince's gross annual income?

$12.25 × 50 = $612.5
$612.5 + $90 = $702.5
$702.5 × 50 = $$\boxed{\$35\,125/yr}$$

5. Astrid works in the oil and gas industry near Fort McMurray, Alberta. She earns $28.30/h and makes double time for hours worked beyond 40 each week. Calculate Astrid's gross income for 45.25 hours worked last week.

$28.30 × 40 = $1132
$(28.30 × 2) × 5.25 = $297.15
$1132 + 297.15 = $$\boxed{\$1429.15/week}$$

6. Jarrod earns an annual salary of $55 300. This year he will receive a 2% bonus. Marie earns $440/week in wages and $150/week in tips. Who earned more this year?

Jarrod : $55 300 × 0.02 = $1106
$55 300 + $1106 = $$\boxed{\$56\,406/yr}$$

Marie : $440 + $150 = $590
$590 × 52 = $$\boxed{\$30\,680/yr}$$

$$\boxed{\text{Jarrod earned more this year}}$$

7. Mario earns 3% straight commission. Brent earns a monthly salary of $3400 and 1% commission on his sales. If they both sell $245 000 worth of merchandise, who earns the higher gross monthly income?

Mario: $245000 × 0.03 = $7350

Brent: $245000 × 0.01 = $2450
$3400 + $2450 = $5850

Mario earned the higher monthly income

8. Tamara wants to earn $3000 next month. She earns a base salary of $600 a month plus 3% commission on sales. How much would she have to sell to earn her target?

$3000 − $600 = $2400

$2400 ÷ 0.03 = $80 000

She would need to sell $80 000

9. Harry assembles cardboard boxes and packs them with canned soup. He averages 320 boxes per day and is paid 30¢ per box. If he works 5 days a week for 50 weeks each year, what is his gross yearly income?

320 × 0.3 = $96
$96 × 5 × 50 = $24 000

10. Kat sells T-shirts at concerts. She is paid $25 per concert and 50¢ for each T-shirt she sells. What were Kat's gross earnings for selling 174 T-shirts at one concert?

$0.50 × 174 = $87
$25 + $87 = $112

11. Suppose you would like to earn at least $300 a week and you have two part-time job offers. Job A pays $9.25/h, 35 h a week Job B pays $8.10/h, 20 h a week, plus 5% commission on sales of about $3000/week Which job would you take? Why would you take that job?

Job A: $9.25 × 35 = $323.75
Job B: $8.10 × 20 = $162
$3000 × 0.05 = $150
$162 + $150 = $312

Job A pays more but Job B you work fewer hours. At both you make over $300. I would take Job B.

12. The company that Lars works for installing car stereos has changed ownership. He used to earn $12.20/h for a 40 h week. Now he is paid $35 for each stereo he installs and he averages 15 installations a week. Does this change benefit Lars? Explain.

Before: $12.20 × 40 = $488

Now: $35 × 15 = $525

yes it benefits him as long as he can keep his installations high.