Name: _____ Date: _____

BLM 10–12

Section 10.4 Math Link

This worksheet will help you with the Math Link on page 399.

Some jobs require working the night shift. Other jobs require working in isolated areas or under hazardous conditions. Depending on the job, the wage may be increased by a certain amount per hour or per month. This increase is called a premium.

1. For example, a worker at a warehouse receives \$2/h in addition to the regular hourly wage for working the night shift. Using the variable r for the regular hourly wage, an equation modelling the total earnings of \$184 for working 8 h is $184 = 8(r + 2)$. Write an equation modelling the total earnings of \$250 for 10 h of work if the premium is \$1/h. Use r to represent the regular hourly wage.

_____

2. An oilfield worker receives a wage of \$130/day plus a premium per day for working in an isolated location. Using the variable p for premium, in dollars, an equation modelling the total earnings of \$5700 for 30 days is $5700 = 30(130 + p)$. Write an equation modelling total earnings of \$4560 for 30 days if the wage is \$110/day plus a premium per day. Use p to represent the premium per day.

_____

3. Research three jobs that pay an hourly or monthly wage plus a premium.

a) Briefly describe the first job. _____

_____

Model the pay, using an equation. State what each variable represents.

_____

b) Briefly describe the second job. _____

_____

Model the pay, using an equation. State what each variable represents.

_____

c) Briefly describe the third job. _____

_____

Model the pay, using an equation. State what each variable represents.

_____