

Problems of the Week # 6

Name: _____

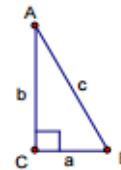
Date: _____

Circle the one best answer. Justify your answer by showing all work below.

26. A travel agent charges a flat fee of 0.75% on the full price of airline tickets processed for clients. If a ticket from Charlotte to Seattle has a full price of \$420, what is the agent's fee?
- A. \$560.00 B. \$315.00 C. \$31.50 D. \$3.15 E. \$0.32

27. How long is the hypotenuse c of a right triangle whose leg b measures $4h$ units, and whose leg a measures $2h$ units ($h > 0$)?

- A. $4h\sqrt{5}$ B. $3h\sqrt{5}$ C. $2h\sqrt{5}$
D. $5h\sqrt{2}$ E. $\frac{3h\sqrt{5}}{2}$



28. It took a copier from 11:12 am until 11:22 am the same day to complete an order that required 45 copies. If the next order is begun at 5:58 pm and requires 135 copies, what is the earliest it will be done?
- A. 5:28 pm B. 6:28 pm C. 6:58 pm D. 6:32 pm E. 6:18 pm

29. Multiply: $(9x - 5y)^2$

- A. $81x^2 - 90xy + 25y^2$ B. $9x^2 + 25y^2$ C. $81x^2 + 25y^2$
D. $9x^2 - 90xy + 25y^2$ E. $81x^2 - 25y^2$

30. Simplify: $64 - \sqrt{-100}$

- A. 54 B. $64 - 10i$ C. $64 + 10i$ D. $64 - 100i$ E. 74