



Problem of the Week

Problem A and Solution

Fishing Frenzy

Problem

In one hour, the eight person crew of the **Hook Line and Sinker** boat caught 120 fish. They then sold each fish for \$3 and divided the total amount of money equally between the crew members.

How much money did each crew member receive?

Solution

One way to solve this problem is to divide the number of fish by the number of people in the crew: $120 \div 8 = 15$. Since each person's share of the catch is 15 fish, and each fish is worth \$3, then each person should receive $15 \times \$3 = \45 after selling the fish.

Another way to determine each person's share is distribute the money earned into 8 equal piles. However, you probably don't want to do this \$1 at a time.

The total amount earned is $120 \times \$3 = \360 . You might start by distributing \$10 at a time to each crew member, until you have less than \$80 left. After doing so, each crew member would have received \$10 four times, so \$40 each, and there would be \$40 left to share among the crew.

Now you can distribute that money \$1 or \$2 at a time, or you might try a higher number like \$5. If you distribute \$5 at a time, each crew member would receive \$5 once.

At this point there would be no money left from the original \$360.

Therefore, each person receives $\$40 + \$5 = \$45$ as their share of the catch.