



Achievement – Evaluate the following.

441. $-6 + -13$

442. $-8 - -14$

443. $24 + -23$

444. $16 - -22$

445. $14 - +35$

446. $-53 - 33$

447. $-38 + 72$

448. $26 - 55$

449. $-57 + 39$

450. $-28 - -34$

451. $-55 + -19$

452. $-37 - -22$

453. $76 - +35$

454. $-67 + 38$

455. $68 - 95$

456. $-41 + -14$

457. $-8 - 3 - 15$

458. $-6 + 14 - 20$

459. $-7 - -2 + -8$

460. $-8 - 15 + -13$

461. $-15 + 9 - 20$

462. $-21 - -12 - -33$

463. $24 + -35 - -25$

464. $-37 + 21 + 15$

465. $-38 - 15 - 19$

466. $21 - -24 - -34$

467. $-58 + +63 + -39$

468. $-44 - 55 - 66$

469. $-17 - -17 + -17$

470. $17 + -17 - -17$



Merit – Answer the following integer addition and subtraction application problems.

471. To find the temperature range we subtract the minimum temperature from the maximum temperature. Find the temperature range for each of the following cities.

Baghdad: Max = 43°C Min = -7°C Quebec: Max = 26°C Min = -14°C

New York: Max = 29°C Min = -3°C Juneau (Alaska): Max = 17°C Min = -6°C

Beijing: Max = 31°C Min = -8°C Oslo: Max = 19°C Min = -7°C

472. The world depth record for scuba diving is -313 m and for free diving -158 m. What is the difference in depth between the two records?

473. A water bore is being drilled. In the first day the drill reaches a depth of 27 metres (-27). If the target depth is 42 metres how much further do they have to go?

474. A tourist travels from the Dead Sea which is 397 m below sea level (-397) to a region 1450 metres above sea level. What is his total change in sea level?

475. A person has a overdraft of \$45 550 ($-\$45\,550$). If they make a lump sum payment of \$26 500, what is the new balance of their account?

476. Stacey purchases a \$4992 LCD TV from a store offering 24 months interest free terms. Her initial statement shows a balance of $-\$4992$. If she pays \$208 per month what is the balance of her first statement?

477. An artifact found at an archaeological dig is dated at 350 BC (-350).

- What would be the age of an artifact 75 years older?
- What would be the age of an artifact 35 years younger?

478. A water bore is drilled to a depth of 23 metres (-23). The drill is then lifted 15 m to clear a blockage and then drills down from this point another 28 m (-28). What depth is the drill at?

479. A submarine dives to a depth of 203 m (-203) and then rises 65 m.

- What is its new depth?
- How far would it have to now dive to reach its maximum depth of 245 m (-245)?

480. Naomi's cheque book has a balance of $-\$158$. Over the next day she banks \$580 in deposits and writes two cheques, one for \$175 and the other for \$68. What is her new balance?

481. A diving bell is working at a depth of 235 m (-235). If the bell is raised 80 m and then dropped from this point another 145 m, what is its new depth?



Achievement – Evaluate the following.

482. -7×-9

483. -10×8

484. $48 \div -12$

485. $-39 \div -3$

486. 18×-5

487. -32×-7

488. $\frac{-42}{7}$

489. $\frac{720}{-24}$

490. -28×-12

491. -16×15

492. $-168 \div -12$

493. $720 \div -24$

494. $-18 \times -2 \times -4$

495. $-16 \times 5 \times -4$

496. $40 \div -2 \div 5$

497. $-64 \div 8 \div -2$

498. $-18 \times -12 \times 4$

499. $-25 \times -5 \times -4$

500. $1440 \div -12 \div -8$

501. $2660 \div -19 \div -4$

502. $-77 \times -4 \div -44$

503. $-1260 \div -15 \times 12$

504. $-46 \times 34 \div -68$

505. $2660 \div -28 \times 15$

506. $-28 \times -3 \times -4 \times 2$

507. $45 \times -6 \times -3 \times 5$

508. $-23\ 625 \div -25 \div -9 \div -15$

509. $19\ 440 \div -12 \div -18 \div -6$

510. $-148 \times -12 \div -6 \times -8$

511. $8000 \div -64 \times -12 \div -5$



Merit – Answer the following integer multiplication and division application problems.

512. If Simon spends \$165 more than he earns each month and his current bank balance is \$850, what will be his balance in 6 months time?
513. Four brothers decide to purchase a bach costing \$245 000. They have \$62 000 for a deposit and have to borrow the rest? What is the balance of each of the brothers' loan account after purchasing the bach?
514. A debt of \$230 000 (-\$230 000) is to be shared evenly among 8 people. How much of the debt is each person responsible for?
515. A business is losing \$440 per month. If their current bank balance is \$1500, what will be their balance in 12 months time?
516. An oil rig has to drill to a depth of 384 m (-384 m). If it can drill at a rate of 32 m per day, how many days before it will reach the required depth?
517. A temperature probe registers a temperature of -124°C . If the probe's temperature increases by 8°C per hour, after how many hours will it be at a temperature of 4°C ?
518. A company's debt accumulates at a rate of \$1.25 million per month (-\$1.25 m).
 a) What would be the company's annual debt?
 b) If the annual debt was to be shared evenly between eight directors, what is each director's liability?
519. A company's current account after one year in business stands at \$3.45 million. If their average profit per month for the next twelve months is \$450 000, what would be the company's new current account balance at the end of the next financial year?
520. The Mariana Trench is 10 911 metres below sea level (-10 911 m), three times more than the depth of the Hikurangi Trench. What is the depth of the Hikurangi Trench?
521. Laguna del Caban in Argentina is 105 metres below sea level (-105 m). The Dead Sea Shore in Israel is four times lower. What is its depth?
522. The balance of Jason's overdraft is \$2450 OD (-\$2450). If Jason's repayments are \$105 per month what will be the balance of his overdraft after 18 months?
523. Kay has a student loan of \$8950 (-\$8950). If she borrows a further \$9750 per year for three years what will be the balance of her loan when she has completed her course?